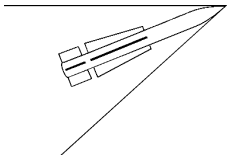
Rocket Scientist's Journal

… UNDER CONSTRUCTION …



Main I Gavin Schmidt on the Acquittal of CO2 »

CO2 ACQUITTAL

THE ACQUITTAL OF CARBON DIOXIDE

by Jeffrey A. Glassman, PhD

Revised 11/16/09.

-

ABSTRACT

Carbon dioxide in the atmosphere is the product of oceanic respiration due to the well-known but under-appreciated *solubility pump*. Carbon dioxide rises out of warm ocean waters where it is added to the atmosphere. There it is mixed with residual and accidental CO2, and circulated, to be absorbed into the sink of the cold ocean waters. Next the *thermohaline circulation* carries the CO2-rich sea water deep into the ocean. A millennium later it appears at the surface in warm waters, saturated by lower pressure and higher temperature, to be exhausted back into the atmosphere.

Throughout the past 420 millennia, comprising four interglacial periods, the Vostok record of atmospheric carbon dioxide concentration is imprinted with, and fully characterized by, the physics of the solubility of CO2 in water, along with the lag in the deep ocean circulation. Notwithstanding that carbon dioxide is a greenhouse gas, atmospheric carbon dioxide has neither caused nor amplified global temperature increases. Increased carbon dioxide has been an effect of global warming, not a cause. Technically, carbon dioxide is a lagging proxy for ocean temperatures. When global temperature, and along with it, ocean temperature rises, the physics of solubility causes atmospheric CO2 to increase. If increases in carbon dioxide, or any other greenhouse gas, could have in turn raised global temperatures, the positive feedback would have been catastrophic. While the conditions for such a catastrophe were present in the Vostok record from natural causes, the runaway event did not occur. Carbon dioxide does not accumulate in the atmosphere.

I. INTRODUCTION

Carbon dioxide, a benign gas, is now the hyper–volatile fuel of public policy, media hype, and world politics. Climatologists, undeterred by their inability to predict even the dominant features of the earth's climate record – the ice ages and the glacial periods – have nonetheless scored a political coup by cobbling together three selected bits of science into a cataclysmic prediction: man is on the verge of destroying life on the planet.

The three cobblestones are (1) a smattering of greenhouse gas physics, (2) half a million years worth of data from Vostok ice cores and (3) half a century of data from Mauna Loa atmospheric CO2 monitoring. Presented here are new results from analysis of the second, the Vostok data, reductions which have a profound effect on the other two legs of the global warming stool, on the role of carbon dioxide, and ultimately on public policy.

{Begin rev. 6/29/08.} IPCC said,

> *One family of hypotheses to explain glacial/inter-glacial variations of atmospheric CO2 relies on physical mechanisms that could change the dissolution and outgassing of CO2 in the ocean. The solubility of CO2 is increased at low temperature, but reduced at high salinity. These effects nearly cancel out over the glacial/inter-glacial cycle, so simple solubility changes are not the answer.*

IPCC, Third Assessment Report (TAR), *Box 3.4, Causes of glacial/inter-glacial changes in atmospheric CO2*, p. 202. Contrary to the IPCC conclusion, "changes in solubility" and second order effects of salinity are irrelevant. Changes in CO2 concentration due to classical temperature effects on solubility between ice age epochs account for the measured variations. These are intra-epoch effects, and whether they "nearly cancel out" on a larger scale is immaterial. {End rev. 6/28/08.}

CONTENTS

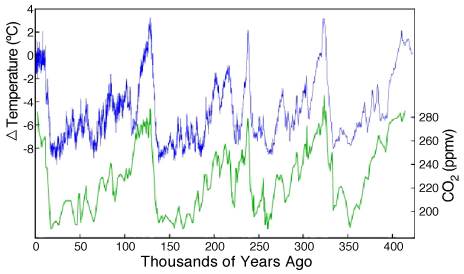
ABSTRACT

I. INTRODUCTION
II. VOSTOK DATA
A. CLIMATOLOGISTS' VIEW OF VOSTOK DATA
B. VOSTOK REMAPPED
III. MODELING VOSTOK CO2 CONCENTRATION
A. CLIMATOLOGISTS CAN'T ACCOUNT FOR ATMOSPHERIC CO2
B. SCIENTIFIC OBSERVATION: SOLUBILITY PHYSICS APPEARS TO ACCOUNT FOR ATMOSPHERIC CO2 CONCENTRATION
C. FITTING SOLUBILITY PHYSICS TO VOSTOK MEASUREMENTS
D. THE OTHER STRAIGHT LINE FIT AND CORRELATION
E. MEASURING AND MODELING THE LAG IN THE CO2 DATA
F. LAG-COMPENSATED CO2 RECORD
G. FINDING THE OPERATING POINT FOR THE VOSTOK CO2 RECORD ON THE SOLUBILITY CURVE
H. THE CO2 CONCENTRATION IN THE VOSTOK ICE CORE DATA IS IMPRINTED BY THE PHYSICS OF THE SOLUBILITY OF CO2 IN WATER
I. ERROR ANALYSIS SHOWS THE PHYSICS OF CO2 SOLUBILITY IN WATER REPRESENTS VOSTOK DATA BETTER THAN ANY POLYNOMIAL
IV. CONCLUSIONS
A. A NEW MODEL FOR ATMOSPHERIC CARBON DIOXIDE
B. CARBON DIOXIDE SHOULD NO LONGER DRIVE PUBLIC POLICY
C. GREENHOUSE CATASTROPHE MODELS (GCMs)
D. WHAT CLIMATOLOGISTS NEED TO DO
BIBLIOGRAPHY

II. VOSTOK DATA

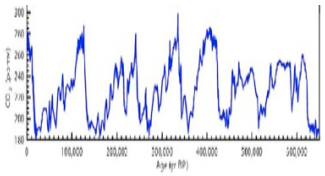
-> Contents …

A. CLIMATOLOGISTS' VIEW OF VOSTOK DATA



"CO2, temperature, and dust concentration measured from the Vostok, Antarctica ice core as reported by Petit et al., 1999." [Dust record deleted.] http://en.wikipedia.org/wiki/Image: Vostok-ice-core-petit.png#file.

Figure 1



Extraneous traces deleted, http://www.realclimate.org/index.php?p=221".

Figure 2

Climatologists show the Vostok ice core data of temperature and carbon dioxide graphically on a frequently reproduced and well-known chart like that in Figure 1. These data reveal a compelling correlation between the concentration of CO2 and temperature.

An aside: Recently published, new ice core data extend the carbon dioxide trace back an additional 200,000 years. Figure 2. This extended record cannot contribute to this analysis until someone reduces and publishes corresponding temperature data.

The author of Figure 1 employs a bit of marginally acceptable, subjective chartsmanship to underscore a point. He selected scale factors and data ranges to emphasize the correlation between carbon dioxide and temperature. The peak to peak swings in the chart traces are arbitrarily made to look alike. This is subjective and artificial, but harmless here.

What is not harmless, though, is climatologists seizing on the lock-step rising and falling of temperature and carbon dioxide as evidence, if not proof, of their greenhouse gas theory: increased CO2 allegedly causes increased temperatures. (A tacit assumption is that the ice core temperature swings represent the global swings, an assumption adopted for this analysis, too.)

{Begin rev. 11/16/09.}

> *The first deep ice cores from Vostok in Antarctica (Barnola et al., 1987; Jouzel et al., 1987, 1993) provided additional evidence of the role of astronomical forcing. They also revealed a highly correlated evolution of temperature changes and atmospheric composition, which was subsequently confirmed over the past 400 kyr (Petit et al., 1999) and now extends to almost 1 Myr. This discovery drove research to understand the causal links between greenhouse gases and climate change.* AR4, ¶1.4.2 *Past Climate Observations, Astronomical Theory and Abrupt Climate Changes*, p.106.

What that causal link was, IPCC implies by predetermination upon its founding in 1988 and to its ultimate determination today that CO2 causes (then) or amplifies (now) a rise in temperature. A decade later, this early causal relationship is made explicit, along with a hint of its invalidation, in a paper not cited by IPCC and not freely available to the public:

> *Abstract. Ice-core measurements of carbon dioxide and the deuterium palaeothermometer reveal significant covariation of temperature and atmospheric CO2 concentrations throughout the climate cycles of the past ice ages. This covariation provides compelling evidence that CO2 is an important forcing factor for climate. But this interpretation is challenged by some substantial mismatches of the CO2 and deuterium records, especially during the onset of the last glaciation, about 120 kyr ago. Here we*

> *incorporate measurements of deuterium excess from Vostok in the temperature reconstruction and show that much of the mismatch is an artefact caused by variations of climate in the water vapour source regions. Using a model that corrects for this effect, we derive a new estimate for the covariation of CO2 and temperature, of $r^2 = 0.89$ for the past 150 kyr and $r^2 = 0.84$ for the period 350–150 kyr ago. Given the complexity of the biogeochemical systems involved,* ***this close relationship strongly supports the importance of carbon dioxide as a forcing factor of climate. Our results also suggest that the mechanisms responsible for the drawdown of CO2 may be more responsive to temperature than previously thought****.* Bold added, Cuffey, K.M., and F. Vimeux, *Covariation of carbon dioxide and temperature from the Vostok ice core after deuterium-excess correction*, Nature 412, 523-527, 8/2/01.

The error arose when Cuffey et al., IPCC, and others relied on the point statistics of the correlation coefficient and the covariance instead of the full correlation function, which depends on the lag, but includes the point statistics at a lag of zero. If the cause goes away and the temperature continues to rise, then **IPCC has modeled the climate as unstable, triggered by a transient orbital forcing event, but destined to heat until the seas run out of CO2.** Or, does IPCC contend the orbital forcing is still present?! {End rev. 11/16/09.} When other analysts examined the data, they found that the CO2 trace *lagged* the temperature curve by about a millennium. This confounds the greenhouse theory prediction. CO2 couldn't be the cause of past global temperature increases!

IPCC climatologists were quick with an offense and a defense. They labeled the discoverers of the lag as contrarians. And carbon dioxide while not *initiating* the temperature rise surely *amplified* it:

> *CO2 changes parallel Antarctic temperature changes during deglaciations (citations). This is consistent with a significant contribution of these greenhouse gases to the glacial–interglacial changes by* ***amplifying*** *the initial orbital forcing (citation).* Bold added, TAR, *¶2.4 How Rapidly did Climate Change in the Distant Past?, ¶2.4.1 Background*, p. 137. http://pame.arctic-council.org/climate/ipcc_tar/ wg1/072.htm.

That was a close call for the catastrophists!

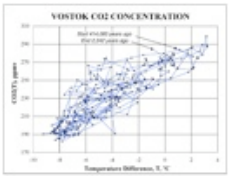
->Contents …

B. VOSTOK REMAPPED

The familiar graph of the Vostok data (Fig. 1), shows temperature and CO2 as functions of time. An alternative is to graph temperature as a function of CO2, or vice versa. An example is Figure 3.

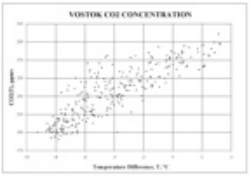
In Figure 3, each pair of simultaneous readings of temperature and CO2 concentration is a dot on the graph, connected in sequence just to show that the time relationship is not lost. For example, the graph has labels for the ages of the first and last points. Without the paths, the dots form a constellation of data, as shown in Figure 4.

This analysis has no further call for the start and end marks. The graphs are just for human visualization of the data. At its roots, the information in the data is arithmetical.



Vostok CO2-temperature pairs. **Figure 3**

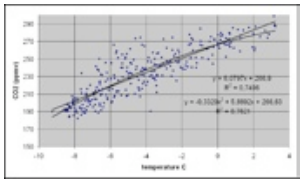
-> Contents …



Vostok CO2/Temperature Constellation. **Figure 4**

III. MODELING VOSTOK CO2 CONCENTRATION

Another observer of current climatology examined Vostok data in a similar coordinate system. He is Ferdinand Engelbeen, a gadfly and regular commenter to RealClimate.org, a major public outlet for IPCC climatologists.



Best fit mathematical lines to the Vostok data. Zero temperature refers to the current global temperature. http://www.ferdinand-engelbeen.be/klimaat/correlation.html. **Figure 5**

Engelbeen's result is shown in Figure 5. He shows a best linear fit and a best quadratic fit, also known as the first and second order fits, respectively. Mathematics guarantees that increasing the order of the fit improves (or at least can't worsen) the fit.

Mr. Engelbeen found this important Vostok relationship "surprisingly linear". (Comment #2, http://www.realclimate.org/index.php?p=13#comment-69.) More importantly, his analysis confirms that the curvature in the data is not an optical illusion.

Curves like Engelbeen's are purely mathematical fits. They indicate correlation, a mathematical relationship, but he gives them no connection to physics. The goal here is to uncover the physical relationship between the historic CO2 concentration and temperature. What *causes* the concentration *effect* to be curved as it is? In other words, can a *cause and effect* model be developed which might account for the correlation seen in the Vostok data?

-> Contents …

A. CLIMATOLOGISTS CAN'T ACCOUNT FOR ATMOSPHERIC CO2

According to at least one report, climatologists are at a loss to explain the source of the CO2:

> *Where did the carbon dioxide come from? "This is one of the grand unsolved puzzles in climate research," said Thomas Stocker,*

a climate modeler at the Physics Institute of the University of Bern. Schoen [1999].

Moreover and to the contrary, climatologists dismiss the oceans as the source. Gavin A. Schmidt (NASA Goddard Institute for Space Studies (GISS), New York, New York; and Department of Earth and Environmental Sciences, Columbia University, New York, New York.) and his blog group at RealClimate believe …

The oceans cannot be a source of carbon to the atmosphere, because we observe them to be a sink of carbon from the atmosphere.

RealClimate, the Group, http://www.realclimate.org/index.php? p=160. Instead, this new analysis establishes that there is no contradiction in the oceans being simultaneously both a source and a sink.

The International Panel on Climate Change (IPCC) seems to agree with RealClimate:

[T]he observed increase in CO2 is predominately due to the oxidation of organic carbon by fossil-fuel combustion and deforestation.

IPCC [2001], *¶C.1 Observed Changes in Globally Well-Mixed Greenhouse Gas Concentrations and Radiative Forcing.* http://pame.arctic-council.org/climate/ipcc_tar/wg1/016.htm . But *predominantly* means not completely. So IPCC concedes:

Thus, the terrestrial biosphere does not cause the difference in atmospheric CO2 between glacial and interglacial periods. The cause must lie in the ocean, and indeed the amount of atmospheric change to be accounted for must be augmented to account for a fraction of the carbon transferred between the land and ocean.

IPCC [2001], *3.3 Palaeo CO2 and Natural Changes in the Carbon Cycle, 3.3.1 Geological History of Atmospheric CO2.* http://www.grida.no/climate/ipcc_tar/wg1/107.htm. That fraction Stocker estimates is about half:

"About 50% of the 80-ppm glacial-to-interglacial increase can be explained by a change in the solubility of carbon dioxide."

Schoen [1999], above, continuing her Stocker quotation. The phrase "change in the solubility" can be read several ways. Regardless, the analysis here shows that the well–known, fixed and constant physics of the temperature–dependent solubility of CO2 in water accounts for **all** the Vostok CO2 concentration measurements.

-> Contents …

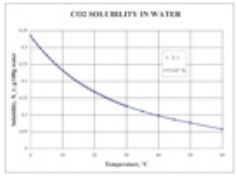
B. SCIENTIFIC OBSERVATION: SOLUBILITY PHYSICS APPEARS TO ACCOUNT FOR ATMOSPHERIC CO2 CONCENTRATION

The solubility of CO2 in water is available from many handbooks, as shown in Figure 6. Solubility, labeled X_1 in the curve by tradition, is the saturated load of CO2 in water at the temperature indicated. It is relative, and dimensionless, being in grams of solute per 100 grams of solvent.

The complement of solubility, 1-X_1, represents the relative amount remaining in the air. (More precisely, the amount remaining in the atmosphere would be C-X_1, where C is an arbitrary constant. The constant C is immaterial to the slope of the curve, so does not enter into the fitting to the Vostok data. Therefore without loss of generality, C is shown as 1.)

As chartsmanship underscored the correlation between Vostok data traces, chartsmanship can make clear the correlation between the Vostok CO2 samples and CO2 solubility in water. Correlation is the key observation underlying this analysis. It is shown in Figure 7 by artful plotting of the complement of the solubility curve atop the Vostok data.

-> Contents …

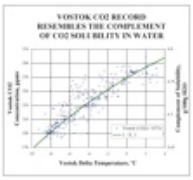


Solubility, X_1, of CO2 in water. Handbook of Chemistry & Physics, 34th ed., 1953, Solubility of Gases in Water, p. 1532. The curve is the best–fit, fifth order by the author.
Figure 6

C. FITTING SOLUBILITY PHYSICS TO VOSTOK MEASUREMENTS

To measure this apparent effect of the solubility pump, the concentration of CO2 may be expressed in relative terms, too. In the following, where relative CO2 concentration is shown, it is in percent of the midpoint of the Vostok concentration, and gets the new label CO2r. Also for convenience, the temperature difference gets the popular nickname "Del T", short for the conventional "Delta T".

The straight line fit to the constellation of data in relative CO2 concentration is shown in Figure 8.



Vostok CO2 concentration appears to be imprinted by the solubility pump.
Figure 7

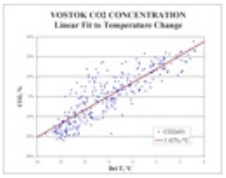
Correlation and straight line fits share some important properties. The straight line is the unique line that minimizes the total (sum square) error between itself and, in this case, the CO2 concentration ratio samples. That straight line has a slope of 3.42% per degree Centigrade. As shown below, this result places the Vostok data squarely on the solubility curve, showing a physically meaningful operating point.

-> Contents …

D. THE OTHER STRAIGHT LINE FIT AND CORRELATION

The analysis could as easily have found the best fit straight line that minimizes the error between the fit and the *temperature* samples instead of the CO2 concentration. Conventionally, the independent variable is graphed on the x-axis, called the abscissa. But to this point, determining which of the variables might be independent and which dependent, is an objective of the analysis.

The choice of which is the dependent and which is the independent variable is often subjective, reflective of a presumed cause and effect model. Climatologists by their Greenhouse Catastrophe Model assume, and attempt to prove, that temperature is the dependent variable. The straight line fit corresponding to dependent temperature is shown alongside that for independent temperature in the next chart, Figure 9.

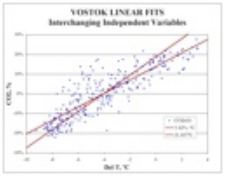


Straight line fit to Vostok constellation of relative CO2 concentration and temperature data pairs.
Figure 8

The catastrophe model has a slope of 21.6 degrees Centigrade per 100 percent change in CO2 concentration, or 0.216ºC/%.

The product of the two slopes is the mathematical “coefficient of determination”, conventionally labeled r^2, with *r* being the “correlation coefficient”.

This dual line–fitting method unmasks some of the mystery of correlation. The smaller the angle between the lines, the stronger the correlation between the two variables. Here the product of the slopes is 0.740. Since the maximum is one, it is subjectively a fairly strong correlation (r = 0.860).



Vostok data represented by alternative straight lines.
Figure 9

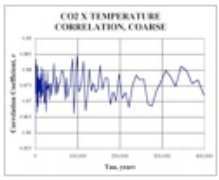
Others, however, have reported a lag in the CO2 data with respect to the temperature. Equivalently, temperature events *lead* or precede CO2 concentration changes. Good analytical techniques require quantification of that lead or lag, and offsetting the data traces to an optimum.

The adjustment is readily made because the graphing steps above preserve the information in the Vostok records. The offset has no effect on the conclusions reached, but does provide a small increase in accuracy.

-> Contents …

E. MEASURING AND MODELING THE LAG IN THE CO2 DATA

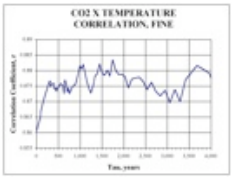
By convention, the Greek *tau* (t for time) stands for lag. The relation between correlation and tau is the *correlation function.* Auto–correlation is correlation of a record with itself, and cross–correlation is the correlation between two different records. Figure 10 contains the cross–correlation function of CO2 and temperature for the entire Vostok record of 400,000 years. (The graph is more dense on the left because of an intentional computational artifact. Sample intervals increase exponentially to simplify the computation load. The correlation method wraps the data on itself, analogous to a 420,000–year long tape loop.)



Cross-correlation function for all Vostok data.
Figure 10

Zooming in by a factor of 100 shows the fine structure in the near term. This is Figure 11.

Three or four nearly equivalent peaks appear where carbon dioxide has the greatest correlation with temperature. The fact that the correlation is relatively poor at zero temperature offset emphasizes that the lag is real, and that any model should account for the lag. Subsequent analysis is offset to the nearest local peak in the correlation at 1073 years. As already stated, the correlation shift has no effect on the qualitative result, namely that CO2 is not responsible for but is a response to global temperature. Applying the lag to the model does improve the accuracy of the results by a few percent.

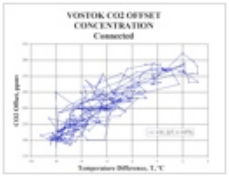


Cross-correlation function for most recent 4,000 years of Vostok data.
Figure 11

-> Contents …

F. LAG–COMPENSATED CO2 RECORD

Offsetting the CO2 trace by 1073 years has the scientifically desirable effect of sharpening or flattening the constellation of data. This is an improvement in signal to noise ratio. It makes the curvature more apparent, as shown in Figure 12.



Vostok sample record with CO2 offset to maximize its correlation with the temperature record.
Figure 12

Again dropping the sample paths and representing the CO2 concentration in percentage produces the new constellation of ice core data, offset for maximum correlation, shown in Figure 13.

The best fit straight line through these points shows that the average variation of CO2 concentration is 3.49% per degree Centigrade, shown in Figure 14. The complementary, catastrophe straight line fit is 21.8ºC per 100% change in CO2 concentration, or 0.218ºC/%, included in Figure 15.

The offset for lag increased the slope from 3.42%/ºC to 3.49%/ºC with temperature as the independent variable, and the catastrophe slope from 0.216 ºC/% to 0.218 ºC/% CO2 with the greenhouse gas as the independent variable. The 1073 year offset slightly changes the operating point on the solubility curve. The product of the two slopes, r^2, is 0.7609, and r is thus increased from 0.860 to 0.872. (Computation of correlation by the straight line fit method does not involved data

wrapping.)

For several reasons, the catastrophic fit can be put to rest. Carbon dioxide is dependent on temperature, and not the reverse. The reason is not just the fact that concentration lags temperature changes, but because it is a physical consequence of the ocean temperature distribution.

-> Contents …

G. FINDING THE OPERATING POINT FOR THE VOSTOK CO2 RECORD ON THE SOLUBILITY CURVE

The slope of the solubility curve is 3.49%/ºC at 8.26ºC. This is where the straight line fit to the lag–adjusted Vostok CO2 concentration is tangent to the solubility curve. It occurs at the solubility level of 0.247 g/100g water, as shown in Figure 16.

Locating the first order operating point on the original solubility data is made difficult by the granularity of the solubility data. The final point comes from analysis of the slope of the solubility curve in various polynomial representations, as shown in Figure 17.

The Vostok CO2 data occur over a relative temperature region, which mathematicians call the *domain*, of 14ºC. The best fit of the solubility curve to the Vostok data occurs in the region of 0ºC to 14ºC, the segment of the solubility curve shown in Figure 18.

-> Contents …

H. THE CO2 CONCENTRATION IN THE VOSTOK ICE CORE DATA IS IMPRINTED BY THE PHYSICS OF THE SOLUBILITY OF CO2 IN WATER

The operating region from the solubility curve transforms into a curve representing the Vostok CO2 concentration, as shown in Figure 19.

This segment of the solubility curve fit to the Vostok CO2 data accounts for all the Vostok CO2 data. That is, there is no additional concentration of CO2 in the Vostok record which is not imprinted with the solubility data. Additional, long term CO2 not involved in the solubility process would reduce the percentage variations, moving the operating point to hotter and physically meaningless temperatures, or even off the solubility curve altogether.

-> Contents …

I. ERROR ANALYSIS SHOWS THE PHYSICS OF CO2 SOLUBILITY IN WATER REPRESENTS VOSTOK DATA BETTER THAN CAN ANY POLYNOMIAL

What remains is assessment of the goodness of the solubility fit and the consequences of the analysis.

First, the solubility curve lies comfortably within the one standard deviation bands of the best linear fit. That fit is shown in Figure 20.

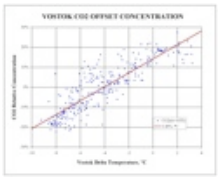
The CO2 solubility model even fits well within the catastrophe trend, as shown in Figure 21.

In fact, the CO2 solubility representation of the relationship between the CO2 concentration data and temperature records at Vostok is superior to any reasonable polynomial fit, as shown by Figure 22.

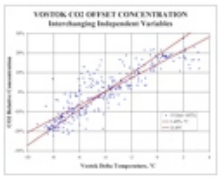
Superimposed in Figure 22 are every polynomial fit to the Vostok data, from the first to the tenth degree, with temperature the independent variable. Unlike the polynomials, the solubility fit has well behaved end effects. At high orders, the polynomials chase measurement errors, including transient effects like volcano eruptions or forest fires, a weakness that worsens as the order increases. The solubility curve chases neither measurement errors nor transients.

The solubility fit is accurate to within a fraction of a percent of the least error, that of the highest order polynomial. The polynomials are slightly superior at error reduction because they have the effect of reducing measurement errors along with representing the physical process. Polynomials are malleable, mathematically guaranteed to fit the data of the underlying process along with the errors and disturbances, but physically meaningless. The solubility model shape is fixed by the underlying physics, and fits according to whether those physics are applicable. Lastly, the solubility model is insensitive to measurement errors or transient events.

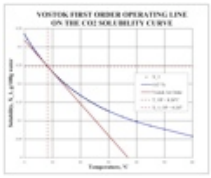
Vostok offset, relative CO2 and temperature pair constellation.
Figure 13



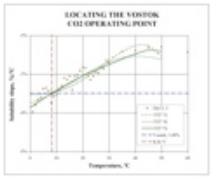
Best linear fit to Vostok data pairs of offset, relative CO2 and temperature.
Figure 14



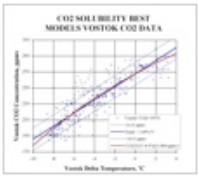
Best linear fit pair to Vostok data pairs of offset, relative CO2 and temperature.
Figure 15



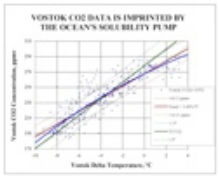
The first order Vostok CO2 concentration varies with temperature according to the solubility curve at 0.247 g/100 g water, corresponding to a temperature of 8.26ºC.
Figure 16



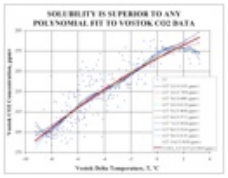
The 3.49%/ºC slope of the Vostok CO2 concentration fits the slope of the solubility curve at 8.26ºC for 3rd, 4th, or 5th order fits.
Figure 17



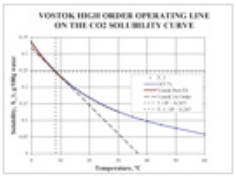
The solubility physics represents the Vostok CO2 data within one standard deviation of the trend line.
Figure 20



The solubility reaction fits well both linear trend lines for the Vostok CO2 concentration data.
Figure 21

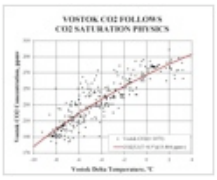


The physics of CO2 solubility in water is better suited to represent the Vostok records than is any polynomial.
Figure 22



The Vostok CO2 concentration best fits the solubility curve in the domain of 0ºC to 14ºC.

Figure 18



Vostok CO2 concentration varies according to the physics of the solubility of CO2 in water.
Figure 19

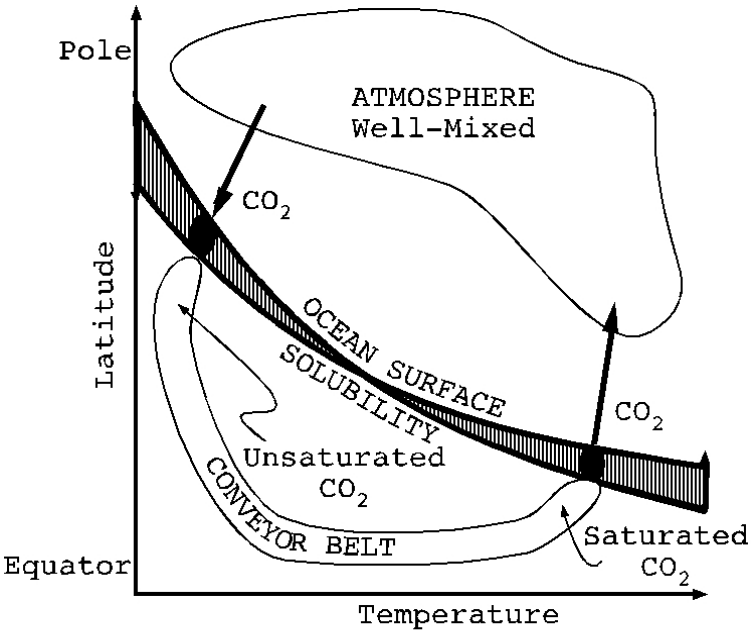
-> Contents …

IV. CONCLUSIONS

A. A NEW MODEL FOR ATMOSPHERIC CARBON DIOXIDE

Science is about models of the real world that, first of all, fit all the data. This analysis is a first step in postulating a scientific model for the CO2 observations. The short term objective here is to characterize the observed concentration that science demands future models reproduce, and to assess the consequences.

Looking beyond that characterizing of the Vostok data, the pattern in the data suggests a model for CO2 such as shown in the sketch of Figure 23.



CARBON DIOXIDE STREAM

Figure 23

{Rev. 11/12/09} The shaded area represents the interface of the ocean surface layer with the atmosphere. The ocean has circulation components that carry light weight water poleward in the surface layer, cooling along the way and thus absorbing more CO2 as Henry's Law requires. It becomes more dense as it cools and is freshened from land runoff in the classical model. But as shown here, it also increases in density as it loads with CO2. It's the surface component of a ThermoHaline Carbon Circulation, THCC. The subsurface component is labeled as the Conveyor Belt. The THCC headwaters are at the poles, where it has a CO2 concentration corresponding to a perpetual temperature of 0ºC to 4ºC, and proportional to the existing CO2 concentration in the atmosphere. The THCC emerges at the surface approximately one millennium later to outgas according to Henry's Law in proportion to the CO2

concentration and surface temperature at the time and place of discharge. The bulk of this outgassing, perhaps 80%, occurs in the Eastern Equatorial Pacific. Thus the hypothesis is that the volume of CO2 outgassed by the ocean is proportional to the CO2 content then, a millennium ago, and the sea surface temperature now. {End Rev. 11/12/09}

Several processes are simultaneously underway in the Carbon Dioxide Stream of Figure 23. Superimposed on a latitude–temperature graph is the solubility curve (shown without its ordinate axis). Solubility gets a shaded thickness to suggest the temperature dependent potential to absorb or release CO2 everywhere.

The atmosphere is a cloud to portray the global mixing of atmospheric gases by the winds. The CO2 exchange should occur to some extent distributed over the surface of the ocean. It should also occur focused by the ocean's meridional overturning circulation, also known as the thermohaline circulation, and popularly called a conveyor belt. The circulation descends at the poles and rises to touch the surface dominantly in the Indian Ocean and the Eastern Pacific. When the belt rises to the surface, the current is saturated with CO2 because of the rising temperature and falling pressure. It is ripe to release the gas.

> *Insofar as the thermohaline circulation governs the rate at which deep waters are exposed to the surface, it may also play an important role in determining the concentration of carbon dioxide in the atmosphere.*

Wikipedia, *Thermohaline Circulation*. The Wikipedia entry also gives 1200 years as the period of the circulation, which is quite close to the observed lag, supplying additional corroboration for the model. See Figure 11, above. This source supplies no hint of the accuracy of the period, or of the probable geographic locations for the release of the CO2. See also http://www.grida.no/climate/vital/32.htm for a nice diagram of the circulation. For a recent revelation that integration of the ocean patterns into the GCMs was still a decade away, see IPCC [2001], Ch. 14 Advancing Our Understanding, ¶14.2.3.2 Thermohaline circulation. http://www.grida.no/climate/ipcc_tar/wg1/508.htm.

> *The distribution of evaporation and precipitation over the ocean (its hydrologic cycle) is one of the least understood elements of the climate system. However, it is now considered one of the most important, especially for ocean circulation changes on decadal to millennial time-scales.*

The Ocean Component of the Global Water Cycle, Raymond W. Schmitt, Department of Physical Oceanography, Woods Hole Oceanographic Institution, [2002]. http://www.earthscape.org/t1/scr01/scr01a.html.

> *The atmosphere only holds a few centimeters of liquid water, or 0.001% of the total.*

heating one part in 100,000 of the water, he seems to attribute to the Man Behind the Curtain that

> *[i]n a stronger CO2 greenhouse climate it is hypothesized that the hydrologic cycle will intensify.*

Id. The cause and effect perversely get reversed. Intensification of the hydrological cycle through heating of the ocean should increase the concentration of CO2 in the atmosphere, where it will have a minute effect on atmospheric temperature.

Along the distributed path, the solubility effect observed in the Vostok data could represent a global average. Alternatively, in the conveyor belt path, the Vostok data could represent the release of CO2 at its focused contacts with the surface. Geometric modeling and calculations would help resolve the better model or a mix of the two mechanisms. The lag in the CO2 record suggests that the conveyor belt is the dominant flow.

-> Contents …

B. CARBON DIOXIDE SHOULD NO LONGER DRIVE PUBLIC POLICY

The discovery that the Vostok CO2 record is an effect of the oceanic solubility pump has profound effects on the science and on public policy.

Over those 420,000 years, warm ocean water has regulated the concentration of CO2 by release of this gas into the atmosphere. Because there is no trace of build–up of CO2 from forest fires, volcanoes, or the oceans themselves, cold waters must be scrubbing CO2 out of the air. Since there is no difference between manmade and natural CO2, anthropogenic CO2 is sure to meet the same fate.

To the extent that the analyst's Vostok temperature trace represents a global atmosphere temperature, so does the concentration of CO2. Thus, CO2 is a proxy for global temperature, and attempting to control global temperatures by regulating anthropogenic CO2 is unfounded, futile, and wasteful.

-> Contents …

C. GREENHOUSE CATASTROPHE MODELS (GCMs)

Since the industrial revolution, man has been dumping CO2 into the atmosphere at an accelerating rate. However the measured increase in the atmosphere amounts to only about half of that manmade CO2. This is what National Geographic called, "The Case of the Missing Carbon". Appenzeller [2004].

Climatologists claim that the increases in CO2 are manmade, notwithstanding the accounting problems. Relying on their greenhouse gas theory, they convinced themselves, and the vulnerable public, that the CO2 causes global warming. What they did next was revise their own embryonic global climate models, previously called GCMs, converting them into greenhouse gas, catastrophe models. The revised GCMs were less able to replicate global climate, but by manual adjustments could show manmade CO2 causing global warming within a few degrees and a fraction!

The history of this commandeering is documented in scores of peer-reviewed journal articles and numerous press releases by the sanctified authors. Three documents are sufficient for the observations here, though reading them is rocket science. (An extensive bibliography on climate, complete with downloadable documents, covering the peer-reviewed literature and companion articles by peer-published authors is available on line from NASA at http://pubs.giss.nasa.gov/.) The three are Hansen, et al., [1997], Hansen, et al., [2002], and Hansen, et al., [2005]. Among Hansen's many co-authors is NASA's Gavin Schmidt, above. He is a frequent contributor to the peer–reviewed literature, and he is responsible for a readable and revealing blog unabashedly promoting AGW. http://www.realclimate.org/.

The three peer-reviewed articles show that the Global Climate Models weren't able to predict climate in 1997. They show that in the next five years, the operators decoupled their models from the ocean and the sun, and converted them into models to support the greenhouse gas catastrophe. They have since restored some solar and ocean effects, but it is a token and a concession to their critics. The GCMs still can't account for even the little ice age, much less the interglacial warming.

All by themselves, the titles of the documents are revealing. The domain of the models has been changed from the climate in general to the "interannual and decadal climate". In this way Hansen et al. placed the little ice age anomaly outside the domain of their GCMs. Thus the little ice age anomaly was no longer a counterexample, a disproof. The word "forcing" appears in each document title. This is a reference to an external condition Hansen et al. impose on the GCMs, and to which the GCMs must respond. The key forcing is a steadily growing and historically unprecedented increase in atmospheric CO2. "Efficacy" is a word coined by the authors to indicate how well the GCMs reproduce the greenhouse effect they want.

In the articles, Hansen et al. show the recent name change from Global Climate Models to Global Circulation Models, a revision appropriate to their abandonment of the goal to predict global climate. The climatologists are still engaged in the daunting and heroic task of making the GCMs replicate just one reasonable, static climate condition, a condition they can then perturb with a load of manmade CO2. The accuracy and sensitivity of their models is no longer how well the models fit earth's climate, but how well the dozens of GCM versions track one another to reproduce a certain, preconceived level of Anthropogenic Global Warming. This suggests that the models may still be called GCMs, but now standing for Greenhouse Catastrophe Models.

In these GCMs, the CO2 concentration is not just a forcing, a boundary condition to which the GCM reacts, but exclusively so. In the GCMs, no part of the CO2 concentration is a "feedback", a consequence of other variables. The GCMs appear to have no provision for the respiration of CO2 by the oceans. They neither account for the uptake of CO2 in the cold waters, nor the exhaust of CO2 from the warmed and CO2–saturated waters, nor the circulation by which the oceans scrub CO2 from the air. Because the GCMs have been split into loosely–coupled atmospheric models and primitive ocean models, they have no mechanism by which to reproduce the temperature dependency of CO2 on water temperature evident in the Vostok data.

GCMs have a long history. They contain solid, well-developed sub-models from physics. These are the bricks in the GCM structure. Unfortunately, the mortar won't set. The operators have adjusted and tuned many of the physical relationships to reproduce a preconceived, desired climate scenario. There is no mechanism left in the models by which to change CO2 from a forcing to a feedback.

Just as the presence of measurable global warming does not prove anthropogenic global warming, the inclusion of some good physics does not validate the GCMs. They are no better than the underlying conjecture, and may not be used responsibly to demonstrate runaway greenhouse effects. Science and ethics demand validation before prediction. That criterion was not met before the climatologists used their models to influence public opinion and public policy.

The conversion of the climate models into greenhouse catastrophe models was exceptionally poor science. It is also evidence of the failure of the vaunted peer review process to protect the scientific process.

-> Contents …

D. WHAT CLIMATOLOGISTS NEED TO DO

The GCMs need to be revamped. They need to have the primary thermodynamic loop restored. This is the chain of dynamic events from solar radiation, through the shading and reflection of clouds responding to temperature changes, absorption primarily in the ocean, and the transport and exchanges of heat and gases by which the oceans create and regulate the earth's climate and atmosphere. The models need to reflect the mechanisms which make the earth's climate not vulnerable, but stable.

The CO2 concentration is a response to the proxy temperature in the Vostok ice core data, not a cause. This does not contradict that CO2 is a greenhouse gas, but it does contradict the conjecture that the presence of a greenhouse gas has any destabilizing effect on global climate. Other forces overwhelm the conjecture of a runaway greenhouse effect. The concentration of CO2 is dynamic, controlled by the solubility pump. Global temperature is controlled first by the primary thermodynamic loop.

The Vostok data support an entirely new model. Atmospheric CO2 is absorbed by the oceans. Fires, volcanoes, and now man deposit CO2 into the atmosphere, but those effects are transient. What exists in steady state is CO2 perpetually pumped into the atmosphere by the oceans. Atmospheric CO2 is a dynamic stream, from the warm ocean and back into the cool ocean.

Public policy represented by the Kyoto Accords and the efforts to reduce CO2 emissions should be scrapped as wasteful, unjustified, and futile.

-> Contents …

BIBLIOGRAPHY

Appenzeller, Tim, National Geographic Magazine, Feb. 2004, *The Case of the Missing Carbon.* http://magma.nationalgeographic.com/ngm/0402/feature5/.

Hansen, J., et al., 1997. *Forcings and chaos in interannual to decadal climate change.* J. Geophys. Res. 102, 25679-25720, doi:10.1029/97JD01495.

Hansen, J., et al., 2002. *Climate forcings in Goddard Institute for Space Studies SI2000 simulations.* J. Geophys. Res. 107, no. D18, 4347, doi:10.1029/2001JD001143.

Hansen, J., et al., 2005. *Efficacy of climate forcings.* J. Geophys. Res. 110, D18104, doi:10.1029/2005JD005776.

International Panel on Climate Change (IPCC), *Climate Change 2001: Working Group I: The Scientific Basis.*

Schoen, Deborah, *Learning from Polar Ice Core Research, Environmental Science & Technology*, April 1, 1999 / Volume 33, Issue 7 / pp. 160 A-163 A. http://pubs.acs.org/hotartcl/est/99/apr/learn.html.

Schmitt, R. W., Department of Physical Oceanography, Woods Hole Oceanographic Institution, [2002], Columbia Earthscape, “an online resource on the global environment”, *The Ocean Component of the Global Water Cycle.* http://www.earthscape.org/t1/scr01/scr01a.html.

Dr. Glassman has a BS, MS, and PhD from the UCLA Engineering, Department of Systems Science, specializing in electronics, applied mathematics, applied physics, communication and information theory. For more than half of three decades at Hughes Aircraft Company he was Division Chief Scientist for Missile Development and Microelectronics Systems Divisions, responsible for engineering, product line planning, and IR&D. Since retiring from Hughes, he has consulted in various high tech fields, including expert witness on communication satellite anomalies for the defense in Astrium v. TRW, et al, and CDMA instructor at Qualcomm. Lecturer, Math and Science Institutes, UCI. Member, Science Education Advisory Board. Author of *Evolution in Science*, Hollowbrook, New Hampshire, 1992, ISDN 0-89341-707-6. He is an expert modeler of diverse physical phenomena, including microwave and millimeter wave propagation in the atmosphere and in solids, ballistic reentry trajectories, missile guidance, solar radiation, thermal energy in avionics and in microcircuit devices, infrared communication, analog and digital signals, large scale fire control systems, diffusion, and electroencephalography. Inventor of a radar on-target detection device, and a stereo digital signal processor. Published *A Generalization of the Fast Fourier Transform*, IEEE Transactions on Computers, 1972. Previously taught detection and estimation theory, probability theory, digital signal processing.

© 2006 JAGlassman. All rights reserved.

Posted on October 24, 2006 6:06 AM | Permalink

TrackBack

TrackBack URL for this entry:http://rocketscientistsjournal.com/cgi-bin/mt/mt-tb.cgi/46

Comments (185)

Alvin Clavin wrote:

> Jeff:
>
> I do not understand the thermocoline of deep ocean currents. Where can I read more, or perhaps you can simply it for me?
>
> *al*

[*RSJ: Try thermohaline.*]

Posted by Alvin Clavin | October 24, 2006 11:44 AM

Stephen wrote:

For completeness, what does the correlation plot for temperature lagging CO2 look like (Figure 11 with negative tau)? Are there any peaks worth noting?

[*RSJ: A graph showing the negative axis was easy to compute, but for the moment too difficult to post here in a comment. It shows a major peak around -800 years, and otherwise is roughly similar to the correlation along the positive axis. The two-sided graph supports well the conclusion not to use zero lag, but it leaves rather arbitrary which of many peaks one might use. The two-sided graph is roughly an even function, but quite noisy. It shows that one should not place too much reliance on cross-correlation. It provides a good clue how one might model the relationship between parameters, and may provide good rejection criteria.*]

Posted by Stephen | October 30, 2006 9:53 PM

Crust wrote:

FYI, Gavin Schmidt has replied to this (though briefly).

[*RSJ:See* **Gavin Schmidt's Response to the Acquittal of CO2 Should Sound the Death Knell for AGW** *on this blog.*]

Posted by Crust | November 1, 2006 7:40 AM

Jesse wrote:

Here is a graph that clearly shows the CO2 lagging the temperature changes;

http://www.daviesand.com/Choices/Precautionary_Planning/New_Data/IceCores1.gif

[*RSJ: I recommend against drawing any such conclusions by eyeball assessment of parametric data plots. It's a numeric problem, suited to more objective computer calculation.*]

Posted by Jesse | November 7, 2006 2:59 PM

C2j+Cjs wrote:

Oceans and Global Warming

November 7th, 2006 by globalwarming2000

Number of science reviews in this field have linked solar activity to the climate change. Rise in global temperature is always accompanied by the rise in CO2 concentration. Human contribution may be significant but it is not critical. By far the greatest amount of CO2 is released by the world's oceans; they are also the largest absorbers. The release of CO2 is not, but its absorption is affected by the Sun. The culprits are UV and gamma radiations reaching the oceans' surface during periods of high sunspot activity.

Some 2 years ago I wrote:

Increased solar activity results in an increase of the harmful radiation, reducing bio-mass of the oceans' surface plankton trough process of sterilisation by irradiation. Result of this is reduced uptake of CO2 from the atmosphere and rising in the 'green-house' effect. Reverse process takes place during reductions in the solar activity

[*RSJ: The consensus among climatologists seems to be that CO2 uptake by the oceans is affected by the solubility curve, wind, and land area, and that it runs between 92 and 107 PgC/yr. But where is their computation? And where is the physics of the additional radiation effects?*]

Posted by C2j+Cjs | November 8, 2006 3:43 AM

Jeff Stewart wrote:

0703221548

Interesting. What peer reviewed journal will it appear in and about when?

[*RSJ: Rev. 10/13/07. A well-publicized study by Naomi Oreskes started with 928 abstracts from refereed scientific journals published between 1993 and 2003 and containing the key phrase "climate change", or some say, "global climate change". Among these, she found that 75%, or 696, articles discussed what she considered the Consensus proposition: global warming is occurring because of manmade greenhouse gas. Of those 696, 100% agreed!*

[*The results prove not Oreskes' conclusion about the existence of a consensus, but instead that with a high probability, the refereed journals in her survey have, for whatever reasons, published no papers disputing the anthropogenic climate change conjecture.*

[*Consequently, submitting **The Acquittal of Carbon Dioxide** to one of these refereed journals is a major waste of time.*

[*A journal dedicated to science and not a cause would seek out and encourage articles challenging the models of the day. That's how science must progress. Instead, too many journals screen against opposing views.*

[*Journals should adopt and publish standards for acceptance of its papers. They should, of course, require stylistic standards, clarity, and relevance to the field of the journal, but most importantly, compliance with the strict scientific method. The recommendation is that obedience to the scientific method be a* prerequisite *for peer review and publication, never a consequence of it. What Oreskes' study shows is the degree to which climatology has sunk to astrology, phrenology, sociology, and paranormal-ology, ostensibly peer-reviewed, published fields.*

[*Of course, any journal that wishes to publish **The Acquittal of Carbon Dioxide** is free to do so at the cost of nothing but attribution. It has been reproduced on other blogs.*

[*Peer review in American science is severely compromised. It is undergoing a treasured rebirth on the Internet. Anyone, peer or not, is free to criticize by commenting on this blog. Peer silence indicates the absence of error or of the need for further exposition.*

[{Begin update 12/5/09}

[*Climatologists are the little men to whom we shouldn't, but must, pay attention, hiding behind the curtain of peer review. Read how they control their own journal peer review process in the CRU emails anonymously whistle-blown on 11/20/09.*

http://www.eastangliaemails.com/index.php

[*For a summary and discussion, see **RSJ** response to John, Channel Isles, 11/26/09, below. While these AGW proponents themselves freely post scientific information and discussions on their own blog, realclimate.org, they boycott other blogs, and, in true peer-review fashion, screen to assure the deference is sufficient but to avoid any hint of heresy. They urge their followers to boycott Journals, neither to submit articles to, nor cite articles from, any that publish what they consider non-conformist papers.*

[*The compromising of professional technical journals is far from exclusive to the field of climatology. The following from another whistle blower is frequently cited in the **Journal**:*

> The mistake, of course, is to have thought that peer review was any more than a crude means of discovering the acceptability - not the validity - of a new finding. Editors and scientists alike insist on the pivotal importance of peer review. We portray peer review to the public as a quasi-sacred process that helps to make science our most objective truth teller. But we know that the system of peer review is biased, unjust, unaccountable, incomplete, easily fixed [*RSJ: jiggered, not repaired*], often insulting, usually ignorant, occasionally foolish, and frequently wrong.
>
> Richard Horton, MD, editor, The Lancet. http://en.wikipedia.org/wiki/Peer_review, citing from http://www.mja.com.au/public/issues/172_04_210200/horton/horton.html .

[*For more discussion on Horton and his implications for science, see **RSJ** response to Cyrus, 8/9/09, below, (not peer reviewed: IPCC Reports, Watson & Crick on the structure of DNA, five of Einstein's seminal papers, realclimate.org, and exxonsecrets.org, the AGW black-listing site).* {End update 12/5/09}]

Posted by Jeff Stewart | March 22, 2007 3:48 PM

Ursus wrote:

Please comment on the linked plot. It explores some of the same concepts you have addressed.

I cross-plotted the Vostok data as you have, but used CO2 concentration as the independent variable as AGW advocates assume. I then used the logarithmic best-fit trend to project temperatures expected if CO2 is indeed "forcing" T.

The CO2 values come from the US South Pole Station, 1958-2004. These values are similar to those from other sampling sites, including Mauna Loa, suggesting good atmospheric mixing of CO2, and should be applicable to Vostok.

Temperature variation at Vostok is projected at 6.23d C in 2004.

Actual dT at Vostok over this period ranges from -1.8d C in 1960 to +2.3d C in 1980, reaching +0.8d C in 2004. Net change over the period is negligible.

This suggests to me that CO2 definitely is not forcing T.

[*RSJ: The AGW advocates do assume that CO2 is the independent variable. However, they contradict that claim in the Third Assessment Report trying to account for the discovery that CO2 lags (the surrogate for) Temperature. To accommodate this inconvenient fact, the IPCC (aka the Consensus) conjectured that while some unknown process triggers a temperature rise, CO2 amplifies it. This conjecture is unsupported by measurements, and results in a model that fails to shape the CO2 concentration according to the complement of the solubility curve.*

[*Your plotting CO2 as the independent variable, that is, along the abscissa, unfortunately proves nothing. The fact that you found a functional fit likewise proves nothing about dependence or independence. You merely found a way to characterize the shape of the data.*

*Almost any function convex down in the region would have produced a similar result, and looking at the data, a function convex up might have worked even better. As the **Acquittal of CO2** shows, one investigator found a nice fit with a quadratic polynomial. Such mathematical regression is the way to "parameterize" (find a parametric equation) relating the variables, but it doesn't provide a cause and effect.*

[*What you need to do is postulate a cause and effect relationship, and then see if the physics of that C&E relationship fit the data. The complement of the solubility curve for CO2 in water does the trick, and it provides as good a fit as quite high order polynomials.*

[*I assume you did your curve fitting at zero lag. At what lags (or leads) do you get the best fit? That should give you a clue about which is the dependent variable. You need to explore the cross-correlation function between these data traces, along with a cause and effect model, to support the dependency analysis.*

[*Your data called "Predicted 1958-2004 Vostok Trend" appear to be the extrapolation of your logarithmic fit. Just to test your method, you might find the logarithmic fit with Temperature as your independent variable. Is the fit about as good? Now find the optimum lags and see which curve is best.*

[*The Vostok data are biased well above your logarithmic fit at CO2 concentrations from about 270 ppmv to 300 ppmv. Your logarithmic fit fails to predict above 270 ppmv.*

[*The reverse log fit might do much better, and your temperature extrapolation will be much hotter, maybe up to 10 degrees C in 2004. The point is that one method has as much validity as the other - none. You cannot draw a valid cause and effect (dependent/independent) conclusion from your method.*

[*Turn now to the well-mixed issue. The IPCC (Consensus) needs that assumption. Some of the graphs in the literature indicate that South Pole readings appear to be from the same population as readings from other parts of the globe, including in particular Mauna Loa in the TAR. This assumption is important to AGW claims that CO2 levels are at unprecedented levels and that man's CO2 pollution has a residence time in the atmosphere between multiple decades and centuries. The data contradict these conclusions, and draw into question the calibration methods used in the various readings.*

[*The residence time of CO2 is easily calculated from IPCC (Consensus) data. It is about 1.5 years to 2.0 years, depending on whether you include the leaf water uptake reported by the IPCC (Consensus).*

[*As to being well-mixed, the IPCC (Consensus) reports that the CO2 north-south gradient is ten times greater than the east-west gradient. This implies first that the east-west gradient is discernable, and second that the north-south gradient is at a minimum substantial, at least 10 times what is discernable. This directly contradicts the well-mixed assumption.*

[*The western Pacific Ocean perpetually emits a huge quantity of CO2. That gas rises at the Equator and splits toward the poles. It rises into Hadley cells which bring the gas down and feed it into the trade winds. This circulation puts Mauna Loa directly in the chimney of the great efflux of CO2 from the ocean. A little decadal shift in climate patterns could move this CO2 plume across Mauna Loa to cause some or all of the observed increases. On the other hand, the cold waters at the poles create a massive sink for CO2. The Vostok data are drawn from the interior of this sink.*

[*Charles Keeling, the father of the Mauna Loa measurements, warned not to mix such data. However, he was known to merge data from different locations by calibration techniques and adjustments. (Rev. 8/27/07.)*

[*Except for its well-mixed assumption, the IPCC (Consensus) offers no explanation for matching data from the sink to data from the source, nor how the gradient bias might have been removed by their data calibration.*

[*As a footnote to the unprecedented CO2 levels in the last 400 to 600 millennia, that is known with a 3% confidence. The present record has exceeded the Vostok maximum for about 50 years. The Vostok data are about 1,500 years between samples. The chances a similar epoch, if it existed, would have been caught by a Vostok sample is about 50/1500.*

[*The Consensus and the IPCC are wrong. CO2 does not persist for multiple decades or longer, but only for a couple of years. CO2 in the atmosphere is not well mixed, but has a substantial, circuitous gradient from the Equatorial effluxes to the polar uptakes. Present day CO2 is not known to any acceptable degree of confidence to be at unprecedented concentrations relative to the past 400 millennia. CO2 is not well-modeled as a slug of gas inserted as a forcing, but instead is overwhelmingly a temperature related feedback from the ocean.*]

Posted by Ursus | April 15, 2007 5:07 PM

Ursus wrote:

A little clarification- in doing this exercise I was not attempting to determine the cause of the shape of the Vostok data crossplot. I was attempting only to test the assumptions adopted by the AGW camp to see if these data support the hypothesis that CO2 forces T. Thus I assumed CO2 as the independent variable, a logarithmic relationship between CO2 and T, and no adjustment for lag.

[*RSJ: I wasn't clear enough last time. (a) You didn't accomplish anything by making CO2 the independent variable. (b) Your logarithmic fit proves nothing. These methods cannot solve the Cause & Effect riddle of science. Lack of correlation can disprove C&E. The existence of correlation only suggests where a C&E relationship might exist to be modeled by physics (or chemistry even).*]

Linear actually is a better fit and predicts a higher temperature, but again the "accepted" relationship is logarithmic.

[*RSJ: You went half-way toward a function convex up. Try making an exponential fit, which is equivalent to making T your independent variable.*

[*I don't know what you mean by "the 'accepted' relationship is logarithmic." Do you have a reference for this claim? Did you happen to reject the linear fit because the T forecast was too big? You need to set an objective standard first.*

[*You don't want to fit data including a part that might constitute your validation specimens. Reserve the hypothetical future data as a test case to validate your model.*]

I am a little puzzled about the CO2 data. I obtained both Mauna Loa and South Pole data from the CDIAC website. Both data sets apparently were processed by Keeling, and on comparison, show maximum divergence in 2004, the last year of record, of 2.8ppmv. This accounts for my assumption that atmospheric CO2 is well mixed. In fact, on cursory examination, the South Pole records show the lowest 2004 concentration of the eight stations reported worldwide, but varies from the highest only by 4 ppmv. But again, I am using the "accepted" data.

[*RSJ: Puzzled is right. Physics indicates a CO2 gradient should follow the wind circulation from the tropical oceanic outgassing to the polar uptakes. The IPCC admits as much, but contradicts it. Keeling warned not to link data from sinks or sources. Yet Mauna Loa sits right in an outgassing plume, and the South Pole data come from inside a sink. The Mauna Loa data should not fit the polar data. Some climatologists linked the Mauna Loa data to the Siple ice core data by arbitrarily shifting the few Siple data 83 years! Was something like that done again? The burden is on the Consensus to justify the method Keeling or others employed. Otherwise, we must reject the results. The Consensus may not adjust data from different sources on the grounds that the gas is well-mixed, and then claim it is well-mixed because once adjusted it fit together. That is a bootstrap and abysmal science.*]

The conclusion I draw from this plot is that if CO2 were forcing T in a logarithmic manner, we should see a temperature trend, based on 1958-2004 CO2 concentrations, scattered about the plotted projection, which obviously is not the case.

[*RSJ: Why? You can fit a logarithmic function to any old scatter of data. You're lacking both an objective standard and a physical model.*]

As an aside, I am most impressed by the lags in the Vostok data where T falls dramatically while CO2 remains high for thousands of years. I cannot see how this possibly could occur if the data are correct and if CO2 is forcing T, unless they represent some catastrophic events like massive and sustained volcanic eruption.

[*RSJ: Your impressions and the drama of the traces are all subjective, and not science. You need to measure the lead-lag relationship, and that requires calculating the cross-correlation function. As the* ***Acquittal of CO2*** *paper shows, this particular function exhibits lots of local peaks, including a few strong ones around 1 millennium. That suggests we should look at the 1 millennium thermohaline half circulation. We should find mechanisms for all the peaks.*]

Posted by Ursus | April 19, 2007 8:49 AM

Ursus wrote:

It seems you really don't understand what I was trying to accomplish. I wasn't looking for the same outcome you were, I was trying to hang the "consensus" with their own rope. That's why I used the tenets they accept, although I don't agree with them.

[*RSJ response: Thanks for being persistent. I get your point now by reading your latest comments with reference to your chart at*

[*http://bp2.blogger.com/_DVW_My87o0E/ReTQzIHwdeI/AAAAAAAAADM/0jlif89LghQ/s1600-h/Temp+v+CO2b.jpg*

[*My apologies for not including the link with your first post.*]

These are, (1), the Vostok data show a relationship between CO2 and dT, that relationship being that CO2 "forces" T; (2) a rise in CO2 produces a logarithmic rise in T (http://adsabs.harvard.edu/abs/2005AGUFM.V41H..03R); (3), CO2 is well enough mixed in the atmosphere that CO2 levels reported for the South Pole station should approximate those at Vostok.

[*RSJ: (1) The correlation at Vostok between CO2 and Temperature supported the Consensus' greenhouse gas conjecture. The lag discovered some time later disproved it. But data traces cannot establish cause and effect; something like the greenhouse effect or outgassing was necessary.*

[*(2) Your reference to the abstract was helpful to your claim where it said, "the effect of CO2 on temperature is logarithmic." However, I could find no way to retrieve the full text of the Ruddiman paper, even if I wanted to pay a fee (which I refuse to do). I had never run across a claim by the Consensus that CO2 and Temperature had a logarithmic relationship, and the abstract is for a 12/05 paper, well after the Consensus locked on to its conjecture. Regardless of the authority, your chart shows the logarithmic fit to be poor. And my paper, the Acquittal of CO2, posted on this cite shows that the relationship is the complement of the solubility curve, something quite different than logarithmic. The Ruddiman claim is dubious.*

[*If I might restate your point, it is that even with as poor a fit as logarithmic, the history of the CO2 and T relationship doesn't predict recent Vostok readings (which I take at face value). Much more downward convexity is needed, but the data are actually convex up. Your argument is valid without making any claims for the goodness of the logarithmic fit.*

[*(3) Vostok and the South Pole ice cores should be quite similar, well-mixed CO2 or not.*]

Therefore, if the supposed "forcing" trend seen in the Vostok ice core data is applied to modern CO2 levels, Vostok should be much warmer than it is today. Should be even warmer assuming a linear fit, far warmer with a convex upward fit. But I stuck with the "consensus" tenets, it's off enough even when using them.

[*RSJ: you're correct that with the better fits of linear or convex up, the ice core history makes CO2 a much worse predictor of Temperature. Whatever the mechanism is that the Consensus contends causes CO2 to force temperature, it remains hidden in GCM code. It seems to remain optimistic that the GCMs will eventually show that CO2 drives T.*

[*The GCMs as presently configured will never reveal the curvature between natural CO2 and Temperature. This is because the Consensus makes CO2 a forcing, inserting a slug and watching what happens to temperature. It needs to be a feedback for the overwhelming natural portion, and that alone should demolish the CO2 theory.*

[*But if the data don't fit, you must acquit. Nice discovery*.]

I did not deal with the lag because it was unnecessary to demonstrate my point. In stating I was "impressed" by the lag, I meant that this seems to be the most compelling indication that CO2 does not force T, though I have not attempted to quantify or account for it.

Posted by Ursus | April 20, 2007 11:10 AM

morgan wrote:

I plotted up CO2 vs. temp records for Law Dome, Dome-C and the rest of EPICA, as you have done here (just for giggles, I was genuinely curious). In Dome-C, CO2 leads temperature.

[*RSJ: This is remarkably good news for the IPCC folks (the Consensus on AGW). For the Third Assessment Report, they had invented the naked theory that while CO2 may not have actually CAUSED global warming, it somehow amplified it! This was because some accepted investigators reported that CO2 lagged the Vostok temperature trace, making a shambles of the CO2-cause temperature-effect conjecture.*

[*Now by lagged, a scientist means that the sample cross-correlation function has a significant lagging peak. Assumedly, you meant that you calculated the cross-correlation between Dome-C temperature and CO2 concentration and found a significant lead component for the CO2 - didn't you? Quantify for the readers, if you would, how the function looked. You didn't just eyeball the graphs, did you?*]

Further, the error in age control of the Vostok cores does not permit your analysis, particularly in the early portion of the record.

[*RSJ: What do you mean by "age control of the Vostok cores"? What is the error in the handling or analysis of the Vostok cores, and in what way do you claim it affects the analysis in the Acquittal of CO2? What of the Vostok record must be disregarded? This will truly disappoint the Consensus.*

[*But not to worry. The analysis in the Acquittal of CO2 assumes that each CO2 concentration reading is at the temperature reading at the greatest ice age less than the given gas age. In theory, a large mean error between the two reported ages could disrupt the correlation and the pattern evident between CO2 and Temperature. This did not happen, however. With whatever errors were manifest in the data, the CO2 and Temperature traces were still highly correlated (86%). The pattern matched the complement of the solubility curve as well as any mathematical polynomial up to 10th order. Natural CO2 comes from the ocean. It is a product of global warming, not a cause*.]

I am no doubter or promoter of 'global warming' etc. but you need to do a little more research (and cite some people for cripe's sake) before you conduct such an analysis.

[*RSJ: When you became not a doubter or promoter of global warming, but a fan and promoter of Anthropogenic Global Warming, how did you judge the science and reasoning? Was there something specific you appreciated, or was it just a matter of the alleged voting? In science, someone always has to go first. How do you measure the adequacy of his research? If the research in the Acquittal of CO2 was inadequate, it must have overlooked something relevant. You must have discovered a paper that refutes the Acquittal of CO2. Please share it*.]

It is typical of the arrogance of physics to think such a complex problem can be distilled into an equation (if it could, our climate models would be a little more precise, eh?). This is not 'consider a spherical cow' and I find the science and reasoning of the prominent geologists and climate scientists to be much more sound than this analysis. Moreover, they have a far greater understanding of the system.

[*RSJ: Physics has arrogance!? Climate models are filled with equations, and they still can't predict. Climatologists, not climatology, urge public policy based on models that neither predict nor match the historical record. That is not arrogant; it is unethical. A few more equations are certain to be added to the GCMs. But remember, climate is a statistic; don't expect precision.*]

The stoichiometric control over CO2 equilibrium between atmospheric and oceanic reservoirs is a compelling argument, but you have neglected to mention the C sinking effects of oceanic biomass (our friends the foraminifera and nano-plankton) -- changing calcite compensation depth and the net sinking of carbon via CaCO3 in the deep ocean account for a great deal of the CO2 variability observed in the long-term record (check out some of Wally Broecker's work). For instance, what is your mechanism for the early to mid-Holocene CO2 anomaly? Your proposed mechanism requires a fundamental change in the ocean conveyor over very short time-scales to induce such events; from what we know about thermohaline circulation and the ocean conveyor, these changes would require great volumes of freshwater dumped into the North Atlantic, or some other such mechanism.

[*RSJ: As to "stoichiometric control over CO2 equilibrium", I give you Caveman's answer: "Yeah, I have a response. What?" Besides, how could the Acquittal of CO2 be negligent in not mentioning an irrelevancy?*

[*The Acquittal of CO2 shows that in the Vostok record, the atmospheric CO2 concentration is curved according to the complement of the solubility of CO2 in water. A sound physical reason supports this result. That curvature of atmospheric CO2 is not modeled in the GCMs. Instead, the operators insert a massive slug of CO2 as a forcing, allowing it to decay slowly over several decades to a century plus. That is now known to be false from the Vostok record, and it is contradicted by the climatologists calculations in the TAR showing 90 GT or more of carbon uptake by the oceans per year. The Consensus position is supported by their well-mixed CO2 conjecture, but that, too, is contrary to the IPCC admission of large gradients (at least ten times the minimum detectable) in CO2 atmospheric concentration. It is also contrary to the physics of the CO2 exchange with the ocean. These findings demolish the CO2 forcing model. As a minimum, the great majority of atmospheric CO2 should be represented as a climatology feedback.*

[*Not only did the Acquittal of CO2 not mention anything like a "stoichiometric control of CO2 equilibrium", it relied on no stoichiometry at all. Even the TAR refers to stoichiometry only three times, and then with no real consequence. Nor does the TAR make mention of any "Holocene anomaly". Climatologists recognize Holocene anomalies, as in the El Niño Southern Oscillation (ENSO), and in insolation. But the TAR says the CO2 concentration was flat, between 260 and 280 ppmv, during the Holocene, making it actually anomalous. Whatever you mean by "mid-Holocene CO2 anomaly", the paper needs no mechanism for it. It is irrelevant to the inconvenient Vostok data.*

[*The TAR says, "The total amount of carbon in the ocean is about 50 times greater than the amount in the atmosphere, and is exchanged with the atmosphere on a time-scale of several hundred years. Dissolution in the oceans provides a large sink for anthropogenic CO2, due in part to its high solubility, but above all because of its dissociation into ions and interactions with sea water constituents (see Box 3.3)." Then it says, "This process depletes surface CO3(2-), reduces alkalinity, and tends to increase pCO2 and drive more outgassing of CO2 (see Box 3.3 and Figure 3.1)." Thus the chemical processes are alleged to crate an excess of the carbonate ion, CO3, which is supposed to be a bottleneck to the absorption of CO2!*

[*This incorporates much of the following opinion of David Archer, a contributing author to the TAR, and while not W. S. Broecker, at least one of his co-authors. Elsewhere Archer has claimed,*

> ["When you release a slug of new CO2 into the atmosphere, dissolution in the ocean gets rid of about three quarters of it, more or less, depending on how much is released. The rest has to await neutralization by reaction with CaCO3 or igneous rocks on land and in the ocean. These rock reactions also restore the pH of the ocean from the CO2 acid spike. My model indicates that about 7% of carbon released today will still be in the atmosphere in 100,000 years. I calculate a mean lifetime, from the sum of all the processes, of about 30,000 years. That's a deceptive number, because it is so strongly influenced by the immense longevity of that long tail. If one is forced to simplify reality into a single number for popular discussion, several hundred years is a sensible number to choose, because it tells three-quarters of the story, and the part of the story which applies to our own lifetimes."

[*This is patent nonsense on two separate grounds. First according to the TAR, about 65% of the 730 GT of atmospheric CO2 is removed every year. That gives a mean residence time of 1.52 years, and a half-life of 0.65 years. Second, the dissolution of atmospheric CO2 in water is a physical process, not a chemical reaction. The ratio of carbonate, bicarbonate, carbon dioxide and carbonic acid, and hence the pH, will adjust thermodynamically until the CO2 concentration is on the solubility curve for CO2 in water. Archer and the TAR make the solubility depend not on just temperature and pressure, but also on the carbonate concentration or the pH. This would be a major new result in physics!*

[*Lastly, it is nonsense because the ocean is not stagnant as the ionic build-up conjecture suggests. The solubility pump loads CO2 in the cold waters, transports it deep and undersaturated at high pressure, returning it to the surface, heated and at atmospheric pressure, to be unloaded from saturated water. The water then circulates on the surface to cool and reabsorb CO2 from the air. The solubility pump depends on the solubility curve, and needs no modification. It accounts well for the Vostok record.*]

Finally, you entirely ignore the atmospheric physics at play here. For the sake of entertainment, if the post-IR CO2 increases are anthropogenic, that does this change the fact that CO2 is indeed a very effective greenhouse gas?

[*RSJ: If we assume the AGW conjecture is valid, then the AGW conjecture is valid. But, it is not. The adjectives "indeed" and "very effective" don't help. Anthropogenic CO2 is quite as effective as natural CO2, but not as effective as H2O, each of which overwhelm the ACO2 in quantity and effectiveness.*]

We've pumped a great deal of it into the atmosphere in a very short amount of time, can you deny the physics of surface warming due to this increase?

[*RSJ. Yes. It is not zero, just negligibly small. Watch this blog for additional explanations.*]

I've met very few physicists who dared deny it. Your arguments are indeed well thought out, but poorly researched. I would be slightly more convinced if you took the time to do your homework on the subject and publish it.

[*RSJ. It is published!*]

Nevertheless, I'm circulating this with my colleagues just to see what they think. Thanks for entertaining this long-winded post, I'm neither a nay-sayer nor dooms-dayer, but I want to see all the data considered; something you've failed to do.

-Morgan

[*RSJ: Where along the AGW route did Morgan fall off the AGW bandwagon? Does he deny that he bought into yet another doomsday scenario?*]

Posted by morgan | May 8, 2007 9:15 PM

Myles Goodman wrote:

You posit that CO2 does NOT accumulate in the atmosphere. How do you explain atmospheric concentrations of CO2 increasing over the last 100 years?

[*RSJ: A full response appears as a separate entry:* ***On Why Co2 Is Known Not To Have Accumulated in the Atmosphere & What Is Happening with Co2 in the Modern Era,*** *6/11/07.*]

Posted by Myles Goodman | June 6, 2007 12:03 AM

Tom Klein wrote:

070624141349

You make the perceptive comment that the Mauna Loa Observatory results may be significantly impacted by the MLO's relative proximity to the equatorial ocean regions where the significant amount of the CO2 release is taking place. Since the amount of the release of CO2 will be controlled by both the CO2 content and the surface temperature of the ocean, the theory could be tested by looking for the impact of El Nino events on the MLO data. If MLO data is impacted by its proximity, the ocean surface temperature change during El Nino should be sufficient to show up in the MLO data.

[*RSJ: Many articles are available on line that identify El Niño events in the Mauna Loa data. Keeling himself along with his fellow researchers, especially Bacastow, investigated the El Niño relationship to the Mauna Loa measurements.*

[*{Begin link rev. 11/22/10.}*

[http://scrippsco2.ucsd.edu/sub_program_history/charles_david_keeling_biography.html

[*Note the References at*

[http://cdiac.ornl.gov/trends/co2/sio-mlo.html

[*{End link rev. 11/22/10.}*

[*(2) Keeling's model of the Southern Oscillation Index included upwelling and releasing of about 0.6 GTons per year of CO2 from depths of 50 to 150 meters during periods when the SOI was positive, that is, during La Niña states. In the opposing, El Niño states, he claimed there was no appreciable CO2 flux. Keeling, C.D. and R. Revelle,* Effects of El Nino/Southern Oscillation on the Atmospheric Content of Carbon Dioxide, *Meteoritics, Vol. 20, No.2, Part 2, June 30, 1985. P. 437.*

[*(3) The great bulk of the 90 to 100 GTons of ocean CO2 outgassing appears to be associated with the thermohaline circulation, known under various names, including the ocean conveyor belt. By comparison, SOI effects may be minor eddy currents. Most of the outgassing occurs south and east of Hawaii, where it rises into the Hadley cells, then north and down into the trade winds feeding the Islands.*

[*Maps of air-sea CO2 flux, along with charts of the THC, strongly support the deep current theory. The maps, frequently attributed to Taro Takahashi, were prepared from pCO2 measurements, the surface wind, and the gas transfer velocity. IPCC, Fourth Assessment Report, p. 523, Figure 7.8. See also*

[http://www.ldeo.columbia.edu/res/pi/CO2/carbondioxide/pages/air_sea_flux_rev1.html

[*The following site provides a map of the Mean Annual Air-Sea Flux for 1995 for non-El Niño conditions!*

[http://www.pmel.noaa.gov/pubs/outstand/feel2331/images/fig06.jpg

[*linked from*

[http://www.pmel.noaa.gov/pubs/outstand/feel2331/feel2331.shtml

[*Somewhere on line you might find an animated, monthly Takahashi map.*]

Posted by Tom Klein | June 24, 2007 2:13 PM

Tom Klein wrote:

Thanks for the references. Keeling & Whorf paper indicates that they recorded the largest increase in CO2 content in the year 1998

- a very strong El Nino year - . The increase in that year, 2.87 ppmv, was more than double than the 46 year average of 1.4 ppmv. Monthly data also show that the largest year to year increases were in the months of August 1998 to about February 1999, the period of the strongest El Nino activity.

Tom Klein

RSJ: Keeling and Revelle discussed the effects of El Niño, including on the carbon cycle, in Effects of El Nino/Southern Oscillation on the Atmospheric Content of Carbon Dioxide*, Meteoritics, Vol. 20, No.2, Part 2, June 30, 1985. P. 437. The IPCC Third Assessment Report restates much of what K&R said, but in the summary omitting the part about the CO2. See* Climate Change 2001*, Technical Summary of the Working Group I Report, p. 52. Climate Change 2001 discusses the El Niño/CO2 link in the context of CO2 variability, and notes the conincident "reduced upwelling of CO2-rich waters". Id., pp. 208-209. Then it concludes with the following observation:*

> [In any case, the slowdown (of the early 1990s) proved to be temporary, and the El Niño of 1998 was marked by the highest rate of CO2 increase on record, 6.0 PgC/yr. *Id.*, p. 210.

[*This is your citation, and it contradicts Keeling's earlier model.*

[*The correlation between El Niño events and atmospheric CO2 concentration was shattered. It might be repaired by examining the correlation between SOI and the CO2 concentration data a bit less processed than the Keeling curve. For more, see RSJ,* **Solar Wind, El Niño/Southern Oscillation, & Global Temperature: Events & Correlations,** *7/6/07.*

[*Outgassing from the thermohaline circulation is a better model than the damaged El Niño model because it, too, accounts for the shape of CO2 concentration with temperature (the complement of the solubility curve) and it accounts for the one millennium lag. Moreover, the THC-CO2 model fits the Takahashi maps.*]

Posted by Tom Klein | June 25, 2007 3:59 PM

Phillip Hoy wrote:

Dear Dr Glassman,

I was delighted to see your analysis here. As an electronics engineer I had been surprised by the EPICA Dome C data which also shows the same phenomena. CO2 lags behind Temperature. Naturally I visited Real Climate to understand why the ice cores are considered crucial to demonstrating the validity of MMGW theory. On their site they mention that CO2 forces temp in a positive feedback mechanism. I then went back to the EPICA Dome C data and found that the increase in temperature at the end of an interglacial is linear, not exponential as you would expect for a positive feedback mechanism. Furthermore, there is no point of inflection in the temperature curve at the time when the CO2 starts to rise. Basically this claim is untrue, as you have said.

Well done for sticking your neck out on this.

One worrying thing have noticed is that since the meaning of the ice core data has been disputed, it is very difficult to get hold of graphs on the internet with high resolution showing the EPICA Dome C data. They were common a while ago, with a good graph being given on Wikipedia. Now you can only find the graphs with a running averager applied to the data to remove the 800year lag and all the peculiar peaks and troughs ironed out. It is shocking that supposedly reputable scientists are prepared to lie to the public to support this highly dubious science.

Keep up the good work.

Regards, P. Hoy.

[*RSJ: Interesting points about the shape of data under positive feedback.*

[*If there were a positive feedback in effect between a greenhouse gas and temperature, the growth of water vapor caused by hotter surface temperatures could have turned Earth into a suffocating hothouse long ago. Sufficient positive feedback will destroy the system or exhaust its dynamic range. The dynamic range limit for water vapor is the vaporization of the last of the liquid water. (Rev. 8/27/07.)*

[*The paucity of good data is a huge problem in this field. The global "Temperature anomaly", like all other data series, should be published without temporal smoothing. The Mauna Loa CO2 concentration since 1958 should be accompanied by a record of the local wind vector and time of day, assuming those data were recorded. From time to time, I have suspected that the Mauna Loa data are a composite including other sites, that it has been adjusted for El Niño events, or that it has been subjected to temporal smoothing. The data should be unambiguous about any such processing, and it should be published without it.*]

Posted by Phillip Hoy | July 9, 2007 9:31 AM

Sunsettommy wrote:

Hello Dr. Glassman

I just posted your Solar Wind article on Global Warming Skeptics homepage. It is an excerpt (The introduction section) The rest of

your interesting paper is linked to your website blog.

I have already posted your paper: The acquittal of CO2 on the GWS website about 3 months ago and repeated on the homepage recently. It got 62 (the repost) reads meaning they went to your link to read the rest.

I also posted Gavin Schmidt's response too. It got 40 reads meaning they went to your link to read the rest.

I also posted The Acquittal of CO2 at an Atheist forum. A few months ago. There they called you names. I kept trying to get them to make a rebuttal against your paper. They kept resisting as they/ kept calling you unflattering names.

I posted it because there were a number of people who claimed to be a scientist who subscribe to the CO2 warming propaganda. I wanted to see if they with science backgrounds find problems with your paper. After a lot of prodding on my part to get these name callers to make a rebuttal. One person finally did and it was not a good one.

I was not impressed.

I will admit that I struggle to understand what you write because I lack a science background. However I do read a lot on the subject and now participate in posting a mix of articles on a Global Warming Skeptic website.

We accept that there has been some warming over the last 100 years. We just do NOT accept the idea that mankind's CO2 emissions adds a lot of warming effect to the atmosphere.

Thank you for your time and effort to post your papers for us to read and learn.

If you want I can provide the link to the ATHEIST forum. If you care to respond.

Cheers

[*RSJ: 10/5/04. The promos are appreciated. Sorry I don't know enough about your sites yet to comment on them.*

[*At some risk of pedantry, but in the interest of promoting the precision science demands, allow me to reflect on the names "Global Warming Skeptics" and the Atheist forum.*

[*Global Warming is a fact not to be rationally denied. That climate on any scale is either warming or cooling is a tautology. It's a fractal-like property. At present, Earth is warming from the last Ice Age, from the last Glacial epoch, and from the Little Ice Age. The inevitable turn-around is not in sight. But to the discredit of the Consensus on climate, it shows no sign of accounting for this warming background before it computes what it considers presently to be an anomalous warming. What should be controversial is not Global Warming but Anthropogenic Global Warming.*

[*Why "Global Warming Skeptics"? To deny global warming is equivalent to denying ice ages.*

[*But skepticism is a quality of every good scientist. When the Consensus attacks skeptics as contrarians, it exposes a deficit in its science literacy. As a minimum, every member of the Consensus community should be skeptical, especially of its own results, fraught with uncertainty, lack of success, and want of forthrightness. As to the contrarian accusation, it is the rejection of the crowd and a widely shared belief. Science is neither a democracy nor a repository for belief systems.*

[*I was piqued by the thought of a peculiar interest an atheist forum might have in errors in the AGW conjecture. I do grant you the Consensus is an evangelical group for a new theology. The fruits of conversions in the new temple are the heady stuff of power and money.*

[*On the other hand, scientific models are, and indeed must be, secular (in the theological not chronological sense). That is not atheistic, and no legitimate model should provide any support for atheism.*

[*Won't you share the unworthy comment?*

[*If you have difficulty at some point in reading one of my papers, please post a pointed comment. Perhaps a clarification would get you back on track, and help others.*]

Posted by Sunsettommy I July 19, 2007 8:35 PM

Ianric Ivarsson wrote:

Consulting my old textbook in inorganic chemistry, written in 1978, I found some numbers which are quite illuminating.

Atmospheric CO2: 330 ppm by volume corresponding to 480 ppm by weight.

Oceanic CO2: 100 ppm by weight.

The bottom line:

2.4E15 kg CO2 in the atmosphere

1.4E17 kg CO2 in the oceans

5E14 kg CO2 biomass flux

2E13 kg CO2 added yearly from fossil fuels

So the rise from 330 to 380 ppm (+15% in 29 years) would be caused by man adding a fraction of a per cent to the total of the CO2-stream?

If man would burn fossil fuels at the rate of 1978 for 7000 years, the amount of CO2 in the CO2-stream would double. I can live with those numbers.

[*RSJ: 10/29/07. Your numbers are part of a set that is a linchpin of the AGW theory: the residence time of anthropogenic CO2 in the atmosphere. For a brief discussion of the topic see* ***On Why CO2 Is Known Not To Have Accumulated in the Atmosphere & What Is Happening with CO2 in the Modern Era*** *in the Journal, and written before the new Fourth Assessment Report could be absorbed. This is a good opportunity to update that report a bit.*

[*First, a brief facts check is appropriate. Your CO2 concentrations of 330 ppmv and 380 ppmv fit the data in the IPCC Third Assessment Report (TAR) (Figure 3.2a, p. 201) and its Fourth Assessment Report (4AR) (Figure 2.3, p. 138).*

[*Apparently you did a multiplication by volume or weight in the reservoirs for the two stocks, and something similar for the two fluxes, too. Your set of four numbers in Petagrams (1 Pg = 10^15g) along with the usual government authorities, is in the table below.*

Parameter	Ivarsson	IPCC TAR	IPCC 4AR	NASA
Atmosphere reservoir, PgC	2,400	730	762	760
Ocean reservoir, PgC	140,000	38,000	38,271	38,000
Biosphere flux to atmosphere, PgC/yr	500	120	121.2	118.5
Fossil Fuel flux to atmosphere, PgC/yr	20	5.3	6.4	6.5

[*8/24/08. Table corrected. Thanks to David.*

[*The IPCC TAR and 4AR columns are from* Climate Change 2001*, Figure 3.1, p. 188; and* Climate Change 2007*, Figure 7.3, p. 515, respectively. The NASA column offered as a check is from NASA at http://science.hq.nasa.gov/oceans/system/carbon.html.*

[*As discussed previously, the Consensus treats natural and anthropogenic as if they flowed in separate physical channels, and obeyed different physics. Now, the Fourth Assessment Report gives further evidence of this view. See Figure 7.3, http://ipcc-wg1.ucar.edu/wg1/Figures/AR4WG1_Ch07-Figs_2007-06-05.ppt .*

[*For 4AR Figure 7.3, the Consensus divides the 763 PgC in the atmosphere into 597 Pg of natural carbon plus 165 Pg of anthropogenic carbon. Its total exchange rate for all sources of natural carbon is 0 PgC/yr, while the net exchange of anthropomorphic CO2 is +3.2 PgC/yr.*

[*This model shows the ocean absorbing 70 Pg/year of natural carbon, and outgassing 70.6. Meanwhile, it has the ocean absorbing 22.2 PgC of anthropogenic carbon, and outgassing 20 PgC. The IPCC provides no physical basis to account for the oceanic uptake of 11.7%/yr (70/597) of natural CO2 (nCO2), while the uptake is 13.5%/yr (22.2/165) for anthropogenic CO2 (ACO2). If the Consensus on Climate relies on geographical differences in the concentration of nCO2 and ACO2, as might be coupled with differences in Sea Surface Temperature, then it runs afoul of its well-mixed conjecture.*

[*In this IPCC model of the carbon cycle, the total absorption rate of nCO2 from the atmosphere is 190.2 PgC/yr from a reservoir of 597 PgC. For ACO2, the total rate is 24.8 PgC/yr from a reservoir of 165 PgC. Then by the IPCC's own definition (4AR, Annex I, p. 948,* Lifetime*), the lifetime of nCO2 is 3.14 years and of ACO2 is 6.65 years.*

[*The lifetime numbers are not indeterminate. They are not in the range of a decade to centuries. And they imply a profound difference in physics that at best might provide a fragile alternative to account for small measurement differences in isotopic fractions.*

[*The Consensus assumes that the natural greenhouse gases, and specifically CO2, are in equilibrium and constant. Then it claims the measured concentration increases from the "Keeling curve" are anthropogenic in origin (4AR, ¶1.3.1, p. 100), confirmed by the 13C/12C isotopic decline at Mauna Loa (id., pp. 138-139). Consequently, the Consensus concludes the residence time of CO2 and the uptake and outgassing fluxes must differ between the natural and the anthropogenic species of CO2.*

[*The Mean Residence Time for CO2 is about 4 years.* Climate Change 2001*, p. 793. It is 150 years, too.* Id.*, p. 386. It is 5 to 200 years, and "[n]o single lifetime can be defined for CO2 because of the different rates of uptake by different removal processes."* Id.*, Table 1, Technical Summary, p. 38. "CO2, which has no specific lifetime".* Id.*, p. 824.*

[*But to the contrary, the IPCC provides a definition and formula for lifetime in the Appendices to both the TAR and the 4AR. While the IPCC gives lifetime several equivalent names, it remains unambiguous. It depends on the size of the reservoir, M, and the total rate of removal from all sources, S. It is a balloon with multiple leaks, some large and some small. This is exactly the same analogy as a bucket*

with several leaks in the bottom provide earlier on this blog. The concept is elementary and is not confused by different size leaks. The formula depends on the total rate of removal, and not on the individual rates of removal comprising the total.

[*To the IPCC, policy trumps science. Residence time is more than just a technical matter. As the Consensus says,*

> [The … **atmospheric residence time of the greenhouse gas - is a highly policy relevant characteristic.** Namely, emissions of a greenhouse gas that has a long atmospheric residence time is a quasi-irreversible commitment to sustained radiative forcing over decades, centuries, or millennia, before natural processes can remove the quantities emitted. Bold added, *Climate Change 2001*, Technical Summary, p. 38.

[*In the TAR, the IPCC offers an explanation for the "current thinking" on physics that "may" distinguish between natural and anthropogenic CO2. See* Climate Change 2001*, ¶3.2.3.2, Uptake of anthropogenic CO2, p. 199. It uses inconclusive words and phrases, including "implies", "may play a significant role", "tended to increase", "implying", and "tightly correlated … but not exactly … matching". It introduces the concept of "'old' waters" with differing rates of CO2 uptake as the discussion touches on the physics of the carbon cycle, limitations on the solubility of CO2, and methods for assessing the ratio of nCO2 to ACO2 in the atmosphere and the ocean.*

[*Three years later on 12/16/04, the AGW proponents at RealClimate.org posted, "How do we know that recent CO2 increases are due to human activities?" It was an effort to shore up the IPCC explanation. It introduced the isotopic discrimination method, saying "One of the best illustrations of this point, however, is not given in IPCC. Indeed, it seems not all that well appreciated in the scientific community, and is worth making more widely known." The first try didn't work, so it was rewritten ten days later.* http://www.realclimate.org/index.php?p=87. *It says, "However, it is the fact that we produce CO2 faster than the ocean and biosphere can absorb it that explains the observed increase." This alleged fact begs the question.*

[*Then the RealClimate defense says,*

> [Another, quite independent way that we know that fossil fuel burning and land clearing specifically are responsible for the increase in CO2 in the last 150 years is through the measurement of carbon isotopes. … CO2 produced from burning fossil fuels or burning forests has quite a different isotopic composition from CO2 in the atmosphere. *Id.*

[*No error analysis is offered for this method of discrimination. The references are variously immaterial or not publicly available.*

[*RealClimate's rehabilitated explanation still doesn't work to explain a model that implies that nCO2 and ACO2 have different solubility curves, nor that they can be faithfully modeled as if physically segregated.*

[*The Carbon Dioxide Information Analysis Center makes a good case for a steady decline in the 13C/12C isotopic ratio background since 1980. Each of ten sites distributed across the globe from 150W to 180W shows a decline.* http://cdiac.ornl.gov/trends/co2/iso-sio/graphics/iso-graphics.html. *Consequently, a model other than burning fossil fuels is needed, and the IPCC provides it for the first time in the Fourth Assessment Report. It is an even more implausible model: the ocean outgases 20 PgC/yr of ACO2. The IPCC struggles to maintain its anthropogenic CO2 conjecture but has no coherent model.*

> [Changes in the 13C/12C ratio of atmospheric CO2 thus indicate the extent to which concurrent CO2 variations can be ascribed to variations in biospheric uptake. The calculation also requires specification of the **turnover times** of carbon in the ocean and on land, because fossil fuel burning implies a continuous release of isotopically light carbon to the atmosphere. This leads to a lowering of the atmospheric 13C/12C isotope ratio, which **takes years to centuries to work its way through the carbon cycle** (Keeling et al., 1980; Tans et al., 1993; Ciais et al., 1995a,b). Bold added, *Climate Change 2001*, Box 3.6, p. 207.

[*Is this a reference to two turnover times, one for the ocean and one for land, or to four turnover times, taking into account different physics for light and heavy CO2? The Consensus doesn't reveal how the turnover times affect the calculation, nor why the lifetimes run into centuries, which is contrary to its own data.*

[*Three of the four references are not freely available to the public, and are not sufficiently cited by the IPCC Report. The abstracts can be read on line, but none even suggests the claims made for the IPCC passage. For Keeling et al, 1980, see*

[http://adsabs.harvard.edu/abs/1980GeoRL...7..505K. *Back issues available only from 1994.*

[*For Ciais et al., 1995a, see*

[http://www.sciencemag.org/cgi/content/abstract/269/5227/1098?ijkey=376bc8031f92290b46a51f3ef76686e6f6d4c9a8&keytype2=tf_ipsecsha. *AAAS membership required.*

[*For Ciais et al, 1995b, see*

[http://www.agu.org/pubs/crossref/1995/94JD02847.shtml. *This paper may be purchased for $9.*

[*The fourth reference, Tans et al., 1993 ("Tans"), by Pieter P. Tans, Joseph A. Berry, and Ralph F. Keeling, is the only reference freely available, and it not only does not support the IPCC claims, but refutes them.*

[*In the abstract, Tans declares,*

> [The main cause of the change (of carbon isotopic ratios) occurring today is the combustion of fossil fuel carbon with lower δ13C values.

[*This would indeed support the IPCC claims, except that it is a presumption for the analysis to follow. Nowhere in the paper does Tans*

establish that fossil fuels produce lighter CO2, nor that other sources of CO2 are all heavier. Without evidence, it is a presumptive, requisite incantation to peers.

[*For Tan's analysis to proceed, his presumption implies that light CO2 emissions be* ***uniquely*** *from fossil fuel. Then to evaluate his equations, Tams assigns a "reasonable value" (p. 364) for δ13C of fossil fuel CO2, δf , of -27.2‰. Tans, p. 357, Table 1. With that, he compares two methods. If they had agreed Tans et al would have had corroboration for the light CO2 presumption. But they didn't. So Tans theorizes,*

> [There could be a process in the real ocean affecting the transfer of CO2 that has thus far been overlooked or has not been properly quantified and/or simulated in the laboratory. If so, its contribution to isotopic fractionation would still have to be determined. *Id.*, p. 366

[*Indeed! The overlooked process is the solubility pump, the cycle of oceanic surface currents from Equator to the poles, and back through the thermohaline circulation. The surface waters cool, absorbing CO2, descending to the ocean depths to rise at the Equator, warmed and again at atmospheric pressure to exhaust CO2 back into the atmosphere. See* **The Acquittal of Carbon Dioxide.**

[*Tans' isotopic model represents the ocean surface as a point, and the ocean as a column. With respect to the ocean, his is a one dimensional model. He represents the concentration of carbon as Co(z), a variable dependent on depth in the ocean, z, alone, and not as Co(x, y, z), where x and y are Cartesian equivalents of latitude and longitude. The total concentration of C in the ocean would be ∫Co(x,y,z)dA = ∫Co(x,y,z)dxdydz, which is equal to A∫Co(z)dz if Co is constant over the surface of the ocean. The last term is Tans expression for the total oceanic surface carbon (*Id.*, equation (3), p. 354), so he has tacitly assumed Co is constant over the surface of the ocean. That is known not to be true. Also, Tans has a single variable, Foa, representing the outgassing of CO2 from his single point ocean model. Instead, Foa is highly dependent on location, as represented in the solubility pump model above, and by Takahashi and now cited by the IPCC (Fourth Assessment Report, p. 523, Figure 7.8). Tans model does not account for the dynamics of the solubility pump.*

[*Tans models the isotopic equilibrium of carbon for an atmosphere fed by three sources: fossil fuel emissions, interactions with the terrestrial biosphere, and the ocean. He has difficulty with terrestrial concentration, and so postulates a delay factor, &tau, in reaching equilibrium.* Id., *p. 356. He expresses no analogous problem with the ocean, though. He represents dissolved inorganic carbon as a single variable, DIC in the text and Co in equations, and asserts that it comprises "the sum of dissolved CO2, bicarbonate ions, and carbonate ions".* Id., *p. 355. He should have broken Co into the sum of at least two variables, e.g., Cmolecular + Cionic. This would introduce the missing, analogous oceanic equilibrium problem necessitating an analogous delay, but it would make explicit his tacit assumptions that the distribution between molecular and ionic carbon in the DIC is constant and instantaneous.*

[*Partitioning DIC into Cmolecular + Cionic allows for the ocean chemistry to interact with Cionic, and the dissolution of atmospheric carbon in the ocean to adjust to Cmolecular. The first is a physical necessity, and the second permits the physics of solubility to operate without adding a novel dependence on ocean chemistry. It divides the ocean carbon reservoir in two, adding a molecular CO2 reservoir to instantaneously adjust to atmospheric CO2 pressure, and to supply ions to ocean chemistry at the pace of thermodynamic equilibration.*

[*Tans model has the effect of tying solubility to ocean chemistry, an error repeated in the IPCC Reports.*

[*Tans conclusion is*

> [The apparent disagreement between the surface disequilibrium method and the oceanic inventory method as well as substantial uncertainties in the application of both methods themselves preclude at this time any firm conclusions on bounds set by the oceanic isotope data on the ocean uptake of CO2. *Id.*, p. 367.

[*In addition to Tans' speculation about a missing process, he restates his conclusion in the abstract and in the main body of his paper:*

> [Recently published $\delta^{13}C$ isotopic data of total inorganic carbon in the oceans (Quay et al., 1992) appear to lead to incompatible results with respect to the uptake of fossil fuel CO2 by the oceans if two different approaches to the data are taken. Consideration of the air-sea isotopic disequilibrium leads to an uptake estimate of only a few tenths of a gigaton C (Gt, for 1015 g) per year, whereas the apparent change in the ocean δ;^{13}C inventory leads to an estimate of more than 2 Gt C yr-1. **Both results are very uncertain with presently available data.** Bold added, *id.*, Abstract.
>
> [The apparent disagreement between the surface disequilibrium method and the oceanic inventory method as well as substantial uncertainties in the application of both methods themselves **preclude at this time any firm conclusions on bounds set by the oceanic isotope data on the ocean uptake of CO2.** Bold added, *id.*, p. 367.

[*Tans et al doesn't just fail to support the IPCC's reliance on his paper, but asserts that isotopic ratio analysis is not ready to support anything.*

[*The suggestion that a CO2 transfer process might have been overlooked is manifest. It is the oceanic thermohaline circulation, dominantly absorbing CO2 at the poles and exhausting it in Equatorial waters. This phenomenon is all but ignored by the Consensus.*

[*Tans et al repeat two IPCC errors, both evident in Tans' Figure 1, p. 354. First, both allows for different flux rates for total carbon and heavy carbon, necessarily implying the novel phenomenon that CO2 solubility is isotopic dependent. Secondly, both introduce novel physics by making solubility dependent on oceanic chemical processes.*

[*Tans et al, the IPCC's sole, freely available authority, refutes the claim for which it was cited. While nothing invalidates the measured*

decline in the isotopic ratio of atmospheric CO2 at some sites, the source of lighter CO2 is open to speculation. With nothing more, the phenomenon cannot support the claim that the change in atmospheric CO2 concentration is due to man.

[*WATCH THIS SPOT FOR MORE IN PREPARATION ON ISOTOPIC MEASUREMENTS AND THEIR ORIGIN.*]

Posted by Ianric Ivarsson | August 4, 2007 8:02 AM

Jim McKinlay BSc MBA wrote:

I am pleased to have found your article and have been thinking along similar lines.

It seems to me that over-laid on the long term 1073 year lag you have identified there are other shorter term lags. The Humboldt Current is a huge shallow system which must act as a conveyor belt and would be expected to have a period of weeks or months.

The seasonal variations in the Hawaii Numbers and also NIWA numbers off Dunedin New Zealand appear to show an 8 month lag with CO2 following temperature change.

I have been pulling together numbers on the total sources of world carbon and was astonished to find that if the total known world reserves of fossil fuels (a bit over 1000Pg) was released into the system, the carbon stocks in the biosphere (90% in water) would increase by about 2.5%. Thats not going to make headlines in the world press.

I also found out that there has been some heavy duty sequestering going on over the last 500 million years and that already 99.3% of all world carbon (6,132,000 Pg) is permanently locked up in Calcite deposits (limestone). At historic deposition rates there will be no carbon left in 1.5 million years. Now there is something the world press could get excite about, the extinction of life on earth! Despite this, some people want to seed the oceans with iron to increase the deposition rate.

I am keen to contribute to this debate and look forward to your comments.

JMcK

New Zealand

[*RSJ: 10/24/07. Interesting conjectures. Are you sure that the lockup of CO2 in Calcite is permanent? Does subduction carry the Calcite into the melt of magma to be released in volcanoes? What else might be the source of CO2 from volcanoes?*

[*And considering volcanoes, Earth is likely to experience many super volcano eruptions in the next 1.5 million years. Yellowstone alone erupts about ever 600,000 years and the next one is geologically imminent. Those events may cause a mass extinction and radically alter the composition of the atmosphere.*

[*We live in a most benign era.*]

Posted by Jim McKinlay BSc MBA | August 9, 2007 10:37 PM

JCAA wrote:

Dr. Glassman's theory does a good job of explaining the lag of CO2 in the ice core data and acquits CO2 for that period. However, it does not deal adequately with the post Industrial Revolution (Post IR) period (1770 to date). In Post IR we know humans have increased atmospheric CO2, and atmospheric CO2 is at a higher level than any ice core data shows. (I understand the argument that a warmer period may have been missed in the ice cores). Some, but obviously not all of the CO2 humans produce, has been absorbed by the oceans. Comparing the two periods is very useful for analysis. In the Pre-IR period, there was an external cause of increased T (such as solar activity). The oceans were heated and released CO2. When the external cause stopped, the reverse occurred. T dropped, oceans cooled, and CO2 was taken up. Now, however, what was an effect of warming (A-CO2) during the Pre-IR period, is very likely a cause. If humans do not stop increasing atmospheric CO2, it seems likely to increase T (how much, how fast?), warm the oceans and release more CO2. Where will this stop? In the Pre-IR period, the cessation of the external forcing stopped the process, and a cooling period began. In the Post IR period, humans are not stopping the [] release of CO2. The answer that the oceans will take up all the CO2 man produces seems a faith only. At this time the oceans have not done this.

[*RSJ: 10/23/07: The Acquittal of Carbon Dioxide doesn't deal with the modern era at all beyond showing some errors in the models reported by the IPCC (aka the Consensus). The paper does not attempt to solve the problem of modeling the climate.*

[*The notion that the post industrial increase in atmospheric CO2 concentration is due to man is false. It is false notwithstanding the fact that the increase is accompanied by a decrease in the isotopic ratio of 13C to 12C, which is expected from the burning of fossil fuel. It is false because this model requires that the solubility of light CO2 be less than the solubility of heavy CO2. A corollary of that problem is that this model treats natural and manmade CO2 as if they could be successfully segregated in the carbon cycle.*

[*You say that "some, but not all of the CO2 humans produce, has been absorbed by the oceans." That is true, but determinative of nothing. That is because it is equally true of the CO2 outgassed by the oceans and the biosphere. The CO2 from the multiple sources is irreversibly mixed in the atmosphere and distributed throughout the carbon cycle. The 90 to 110 Gigatons of carbon released just by the ocean alone swamps the 6 Gigatons of manmade CO2.*

[*No evidence exists that the ocean has ever operated per your explanation. It doesn't switch between global outgassing and global absorbing of CO2. The two processes are continuously underway so long as the ocean is substantially liquid. Cold, dense waters at the poles, heavily laden with recently absorbed CO2, descend, pushing the thermohaline circulation. A millennium later, the circulation resurfaces, especially in the Eastern Equatorial Pacific, warmed and under reduced pressure to outgas CO2 according to the physics of solubility. This cycle, ignored in the Consensus' GCMs, would continue even if the slow chemical and vertical circulations (which it does include in the GCMs) didn't exist at all.*

[*Natural CO2 in the atmosphere increases with great regularity on glacial scales, as revealed by the Vostok data. Not only that, but the process naturally reverses itself. This year, over 90 Gt of C from the ocean is not going to cause a runaway effect. The notion that man's 6 Gt will, even over 10 years, is ludicrous.*

[*In 1984, James E. Hansen said,*

> [Thus our calculations indicate that the gap between current climate and the equilibrium climate for current atmospheric composition may grow rapidly in the immediate future, if greenhouse gases continue to increase at or near present rates.
>
> [As this gap grows, is it possible that a point will be reached at which the current climate "jumps" to the equilibrium climate? If exchange between the mixed layer and deeper ocean were reduced greatly, the equilibrium climate could be approached **in as little as 10-20 years** … . Bold added, Hansen et al., Climate Sensitivity: Analysis of Feedback Mechanisms, Climate Processes and Climate Sensitivity Geophysical Monograph 29, Maurice Ewing Volume 5.

[*In 2007, Hansen says,*

> [*Have we already passed a "tipping point" such that it is now impossible to avoid "dangerous" climate change [citation]? In our estimation, we must be close to such a point, but we may not have passed it yet. …*
>
> [*Continued rapid growth of CO2 emissions and infrastructure **for another decade** may make attainment of the alternative scenario impractical if not impossible. Bold added, Hansen, J., et al, Dangerous human-made interference with climate: a GISS modelE Study, Atmos. Chem. Phys., 7, 2287-2312, 7/5/07, p. 2306.*

[*According to this Guru of Anthropogenic Global Warming, we're at "t minus ten years" and holding. We have been for 23 years.*

[*The climate is warming. The turn around in the warming since the last ice age, or the last glacial epoch, or even the Little Ice Age, is not yet apparent, notwithstanding any distribution of "hottest years on record".*

[*The Consensus reckons that the current level of CO2 is 379 ppm, which is actually Mauna Loa data. It says that this is "very likely much higher than any time in at least 650 kyr". To the contrary, Siple data show a peak of 390 ppm occurring within the last 140 kyr. For discussion and citations, see* On Why Co2 Is Known Not To Have Accumulated in the Atmosphere & What Is Happening with CO2 in the Modern Era*, RSJ response to comment of 10/14/07 12:13 PM. Not only has the recent high CO2 level, measured in the plume of the Eastern Equatorial Pacific outgassing, been exceeded within 650 kyr, it was exceeded within the Antarctic CO2 sink within only 140 kyr.*

[*The political problem is the technical fact that man has had nothing perceptible to do with it. It's a false alarm.*]

Posted by JCAA | August 12, 2007 7:27 AM

Ursus wrote:

One of your contributors was commenting about the disappearance of high-resolution plots of the Vostok data. The cited URL links to one I generated, you may link to it or post it if you like.

[*RSJ: The link appears in our April dialog, above. See RSJ response to your post of 4/19/07.*]

Posted by Ursus | August 13, 2007 4:38 PM

Jim McKinlay wrote:

Dr Glassman

Seems to me that Vostok is a pretty unique place. South magnetic pole, it has recorded the worlds lowest temperature (-67C today), 3500 m elevation but with an atmosphere more like 6000 m. It has extremely low but consistent levels of precipitation. It has probably the lowest level of CO2 of any where on the surface of globe right now and probably always did have.

Is it correct that serious scientists have simply cobbled the Hawaii data onto the end of the Vostok data? What adjustments should be used to covert Vostok into a reasonable a proxy for historic world CO2 levels? It is not obvious to me that a linear adjustment would be sufficient.

JMcK

[*RSJ: See IPCC Third Assessment Report, Climate Change 2001, Technical Summary, Figure 10, p. 40 or Figure 3.2, p. 201. You'll find an overlay of South Pole data on Mauna Loa data, undoubtedly due to Keeling. Figure (a). The IPCC gives no hint how or why the two*

traces agree as well as they do. You'll also find a separate Vostok chart. Figure (d). The coarsest resolution goes back half a billion years. Figure (f). It shows past CO2 concentrations about 20 times as great as today's.

[*The IPCC needs the assumption that the CO2 is well-mixed, so it argues that because the lifetime of CO2 in the air is decades to centuries, it must be well mixed. The conclusion does not follow from the premise, and the premise is false. By IPCC's own figures and formula, the lifetime is less than four years.*

[*An approach to characterizing the global CO2 concentration might start with a model of the global pattern of natural CO2 flow. The seasonal and global temperature dependence could be then added. Now the model would be ready to add the small signal of manmade CO2. The model would be far from linear. It would resemble a seasonally varying, temperature dependent pattern like the prevailing winds.*

[*All this would make a fine, career enhancing, academic study, but little more. The GCMs and the Consensus have several, much more profound problems.*]

Posted by Jim McKinlay | August 14, 2007 11:33 PM

Nick wrote:

When carbon dioxide is examined via the medium of infra-red spectroscopy, the results seem to indicate that it is, compared to water vapour, a fairly insubstantial "greenhouse gas". Why then is this not more widely noticed, and why does the IPCC and governments around the world insist that cutting CO2 is the way forwards?

[*RSJ: The IPCC didn't ignore the spectral properties of greenhouse gases, but it could have put a lot more effort into reporting on the subject. Many others have made such a contribution. See for example Kiehl, J. T. and K. E. Trenberth,* Earth's Annual Global Mean Energy Budget*, Bull. Am. Met. Soc. 78, 197-208, 1997 for a nice discussion of the importance of the spectral properties of the atmosphere in filtering the incoming solar radiation and retaining the outgoing blackbody radiation. This paper is also the source of the radiation budget that is the heart of the IPCC's radiative forcing paradigm, the method by which the Consensus hoped to solve a knotty thermodynamics problem.* Climate Change 2001*, Figure 1.2, p. 90.*

[*A couple of papers by Raymond T. Pierrehumbert, a "lead author" of the IPCC reports, are actually worthwhile and relevant. The first is Lecture 6 of a series of Conceptual Models of the Climate given at Woods Hole Oceanographic Institute beginning 6/18/01. It is titled* "Energy Balance Models (How I learned to stop worrying, and taught myself radiative transfer …"*. He discusses the absorption spectra of greenhouse gases, observing at one point,*

> [the importance of line spectra in determining atmospheric absorption has the unappealing consequence that one needs a sophisticated treatment of radiative transfer in order to construct properly a model of the climatic energy balance. *Id.*, 75.

[*This difficulty may have given weight to the IPCC's decision not to invest too heavily on absorption spectra discussions. For a more extensive discussion of the climate problem, see the on-line text, Pierrehumbert, R. T.,* Principles of Planetary Climate, 7/31/07, a work in progress.

[*An interesting diagram of spectral absorption in greenhouse gases is at http://www.globalwarmingart.com/images/7/7c/Atmospheric_Transmission.png. Be wary, though, because the spectra are smoothed and normalized, and presumably are at constant and unspecified temperature and humidity. Nevertheless, this diagram serves to show that the absorption of water vapor leaves a couple of windows, one open and one ajar, where CO2 has absorption bands. It is here that CO2 can contribute to the greenhouse theory.*

[*The water vapor windows not only admit CO2 to the greenhouse gas effect, but together produce an opening for the IPCC's AGW conjecture. Its story begins with the growth in atmospheric CO2 concentration reported by Keeling, coincident with increasing fossil fuel emissions and with a global warming trend. Invoking the century-old greenhouse gas model along with the spectral window opportunities, the Consensus postulates that the CO2 must be the cause of the warming. QED.*

[*Of course, that's not the end of the AGW story, but it's the end of the absorption spectra part. The window is open for the GCMs.*]

Posted by Nick | August 23, 2007 10:39 AM

Rene Descartes wrote:

0708251224

Perhaps Dr Glassman would enlighten us as to which peer reviewed scientific journals he submitted his paper to. If it was rejected, he should have received reasons by the reviewers of his paper. He should inform us as to what these reviews said. If he has not submitted his paper to the normal scrutiny of the scientific method, he should say why. Telling us that "submitting The Acquittal of Carbon Dioxide to one of these refereed journals is a major waste of time" is a cop out. If the MMCC

[*RSJ: MMCC ~ man made climate change, and here Anthropogenic Global Warming (AGW).*]

theory is wrong, only by rigorous application of the scientific method and submitting research to the scrutiny of the peer review process

will change it. By not doing this, Dr Glassman places himself in the same category as "Creation Science" (an oxymoron if ever there was one) and conspiracy theorists, no doubt getting a dedicated audience but ultimately having zero impact on the direction of scientific agenda. I realise the population at large loves a science maverick, but in reality very few mavericks have changed the direction of science. Galileo, Newton and their contemporaries established what we would recognise as the modern scientific method to ensure science progressed in as rational and objective way as humanly possible. Einstein, Darwin all operated within the established framework. All the science and technologies we take for granted that sustain the modern world happened this way. Where revolutionaries have changed science (Copernicus, Galileo, Newton, Darwin, Einstein) they take it further away from the "common sense" experience of the population at large, not closer to it. In Climate Change science we don't appear to need a scientific revolution such as spurred on Galileo, Darwin and Einstein: the current scientific state of the art is perfectly adequate to explain what we now observe: applying the knowledge to highly complex, chaotic systems is the problem.

However, Dr Glassman fails to explain why the observed 30% rise in CO2 since 1750 doesn't retain the heat the accepted science since Arrhenius says it must. Interglacial lags (which IPCC AR4 goes a long way to explaining in a way consistent with MMCC) are actually irrelevant in that context as JCAA points out. However, if he's that sure of his case, only by submitting it to professional scrutiny will we know if it's at all sound; playing to the sceptic gallery won't, I'm afraid.

[*RSJ: Thanks for contributing to the on-line peer review. The lofty comparisons are a bit over-the-top, though. Rene Descartes' reference to a "major waste of time" is found in the 3/22/07 RSJ response to why the work on this blog has not been submitted to a peer review journal.*

[*But for the IPCC (aka the Consensus), there would be no global warming problem. The IPCC reports are public, addressed to "policymakers", and they are not a product of peer review. RealClimate.org, the defender of the AGW conjecture, is a blog, and not subjected to any independent peer review panel. Greenpeace and its black list of AGW critics, exxonsecrets.org, are not peer reviewed, academic, operations. The Kyoto Protocol is neither peer reviewed nor academic. These are not "cop outs", but a political movement for power and control in the guise of science. Policymakers respond with laws, not peer-reviewed journal papers.*

[*The unsymmetrical mantra of "not peer reviewed" is indistinguishable from its cousin, the ad hominem attack. Neither has merit.*

[*Rene Descartes, like the Consensus, doesn't realize that a rise in CO2 would cause the climate to warm, per Arrhenius and Fourier, **all other things being equal**. All other things are far from equal in the climate.*

[*For further enlightenment, watch for a paper soon to be published here that presents a new climate model, one that accounts for the failure of greenhouse gases to warm as predicted by the Consensus.*

[{Begin update 12/5/09} *For more, see **RSJ** response to Cyrus, 8/9/09 (not peer reviewed: IPCC Reports, Watson & Crick on the structure of DNA, five of Einstein's seminal papers, realclimate.org, and exxonsecrets.org, the AGW black-listing site). Also see **RSJ** response to Jeff Stewart, 3/22/07 (updated 12/5/09), (standards professional journals should enforce; The Lancet editor Horton blows the whistle on peer review; anonymous whistle blower exposes CRU email, US and UK climatologists conspire to commit AGW fraud).* {End update 12/5/09}]

Posted by Rene Descartes | August 25, 2007 12:24 PM

Sunsettommy wrote:

Greenhouse Warming? What Greenhouse Warming? Written by Christopher Mon[c]kton, 3rd Viscount Monkton of Brenchley, Wednesday, 22 August 2007

http://scienceandpublicpolicy.org/monckton_papers/greenhouse_warming_what_greenhouse_warming_.html

I posted this because you mentioned that soon you will post a paper. Covering a similar angle on the topic.

"[For further enlightenment, watch for a paper soon to be published here that presents a new climate model, one that accounts for the failure of greenhouse gases to warm as predicted by the Consensus.]".

At any rate it is an interesting paper.

Cheers

[*RSJ: 10/4/07. Lord Monckton correctly points out a problem that the IPCC (aka the Consensus on Climate) climate models regionally don't match observations. This does seem to be admitted by the Consensus. Monckton legitimately takes this inconsistency to the point of invalidating the models, something the Consensus is sure to reject.*

[*However in reaching his conclusion, Monckton overlooks several other, higher order problems.*

[*First what might be called a matter of scale is that global warming by its very name is a thermodynamic problem. It deals with the hypothetical concepts of a global average solar radiation and a global average surface temperature, two parameters which don't exist in the real world to be measured. Just consider, for example, the diurnal (day night) and surface elevation problems. The values of these parameters must be inferred. At the next level, and all but overlooked by the Consensus, is the global average albedo. It, too, is impossible to measure directly, and the Consensus has failed to emulate it dynamically in its GCMs.*

[*The GCMs are a simulation experiment, so far unsuccessful, to assess the thermodynamic problem with a vast network of adjusted*

weather models, predominantly simplified to represent mostly radiation, real or equivalent. The problem Monckton addresses is a specific, regional problem in this once noble exercise. He notes,

> if we considered only global temperatures, as many climatologists do, this signature of anthropogenic as distinct from natural warming would not become visible. Accordingly, the objections of Essex and McKitrick (2002) and Essex et al. (2007) to the use of globally averaged temperature are justifiable.

[*Considered on the appropriate scale, both sides are correct.*

[*Next Monckton summarizes six causes postulated by the Consensus to account for the particular zonal temperature patterns:*

> [(a) natural radiative forcing from changes in solar activity;
>
> [(b) natural radiative forcing from changes in volcanic activity;
>
> [(c) anthropogenic radiative forcing from emissions of CO2 and other well-mixed greenhouse gases;
>
> [(d) anthropogenic radiative forcing from changes in tropospheric and stratospheric ozone;
>
> [(e) anthropogenic radiative forcing from pollutant sulphate aerosol particles emitted to the atmosphere; and
>
> [(f) all natural and anthropogenic forcings combined.

[*This set of causes omits the profound, natural effect of albedo variations, especially the negative feedback due to cloud albedo. As bad as GCMs might be at representing regional temperature distributions, the thing they do least well is to model clouds, all as admitted by the Consensus. Moreover, what has yet to be published is that the Consensus does not understand feedback, and does not model it correctly.*

[*Next, the set of causes omits the natural emissions of CO2. These are 30 times as great as the anthropogenic emissions it does include. The natural emissions from the ocean dominate the paleo record, and are 16 times as great as the ACO2. See* **The Acquittal of Carbon Dioxide**.

[*The atmospheric CO2 is not well-mixed. The presumption that atmospheric CO2 is long-lived, which gives rise to the well-mixed conclusion, is false.*

[*The Consensus' GCMs model the atmosphere on the margin. The climate in this representation has a large, unstable, natural component and a small, anthropogenic disturbance. Of course, the natural world cannot be unstable, and the anthropogenic forcings cannot be simple add-ons, especially so under the well-mixed conjecture. Moreover, the GCMs do not model the natural world with a warming component. The natural world was (before man, that is) always either warming or cooling. Consequently the natural warming trends since the last ice age, since the last glacial epoch, and since the Little Ice Age, which almost exclusively were natural, are in the GCM models attributed to the anthropogenic forcings. The GCMs are highly flawed, and far from being validated as Monckton recently witnessed, hence to be theories on which to base public policy, are mere conjectures on which one might someday build a theory.*]

Posted by Sunsettommy | August 30, 2007 6:52 PM

Earle Stone wrote:

I've very carefully read this series. I now use it as part of talking to my students about the scientific method, graphing, statistical treatment of data, chartmanship, and peer review. I agree with what you say. It seems to me now that we must disengage ourselves from the tar baby that is CO2 and start working on the real problem. Our generation of waste heat. At my best estimate (on the conservative side)40% of the energy we use we convert to waste heat. It may not truly effect the Earth's climate, but it is energy we are just throwing away. The more I become involved in this debate the more I want to return my Ph.D.

[*RSJ:10/4/07. Most encouraging! You have perceived the underlying problem with the AGW crisis: it fails as an exercise in science.*

[*Our generation of waste heat is a problem in economics. That is not a lesson from Economics Departments, but the sometimes curricula of Engineering Schools. I calculated once that the* total *energy used by man was one 24,000th of the energy collected from the Sun. Just the known variations in solar radiation, negligible with respect to the climate, swamp what man uses, much less what he wastes.*

[*I'd like to see your curriculum include the theories of interest and present value, plus probability and risk. Then you'd have a rather full set of tools to understand the waste heat problem. It might be too much for a single course in college chemistry, but these concepts should be taught in K-12 anyway.*

[*You're* Philosophiae Doctor *program I'd wager belied its name, containing nothing explicit about the philosophy of science. That seems to be taught nowhere, except incorrectly in philosophy departments, as with Popper, Feyerabend, etc. You might acquire it by osmosis, but that's OK, too. Don't return your PhD -- just enjoy that it led to the philosophy.*

[*Thanks for the link to the RSJ. (See http://www.chem.tamu.edu/class/fyp/stone/.)*]

Posted by Earle Stone | September 6, 2007 6:24 AM

Alan Siddons wrote:

Sir, a more general question about Vostok if I may.

The most prominent feature of an ice core record is its "leaning sawtooth" pattern, a rapid rise followed by a gradual fall, repeatedly, even in the tinier blips. This does not conform to a solar irradiance kind of cycle, which would look more like a symmetrical sine wave.

This is a mystery to me. My only guess is that something like a "cat out of the bag" scenario is at play and that the ocean is the "bag." When you look at the temperature profile, you're actually looking at oxygen and deuterium counts, so it's really no different than the CO2 profile, since both consist of captured elements. Assuming that the ocean is the major repository for elements of all kinds, then, I imagine this:

You've got a bucket full of gas-saturated water that you bring into a room. You close the door and turn up the heat in that room. The water warms, releasing its gases. Now those gases are floating around everywhere. Turn the thermostat down. The water cools, re-absorbing the gases. But here's the thing. It's going to take longer for the bucket to absorb those gases than it took to release them. Warming up, it dumped them into a large volume of air. As the water cools down, these distant wanderers have to make contact with the bucket again to get sucked in.

Putting the cat back in the bag takes time - which gives you a leaning sawtooth pattern, rapid gas rise in the air, gradual decline. Even if the water cools down at the same rate as it warms up, the atmosphere's gas contents won't follow a similar schedule. I suspect that something like this is going on and that actual temperature cycles are more symmetrical and their peak and valley periods are different than element counts in ice cores indicate.

Is this a valid interpretation do you think?

Alan Siddons

PS: This recent article might interest you

http://icecap.us/index.php/go/joes-blog/carbon_dioxide_the_houdini_of_gases/

[*RSJ:10/4/07, rev. 4/16/08. You're gas-saturated water in a room is not too far off the mark, considering the thermohaline circulation. Sea water returning on the surface from its outgassing sites, cools and absorbs increasing amounts of CO2 on its routes to the poles. There, nearly in equilibrium with ice, it absorbs the last of the CO2, and plunges to depths. After a millennium or so, it surfaces at the Equator, at reduced pressure (relative to the depths) and increased temperature. This is the surface solubility pump, and it would account for part of your model. But that is a continuing process at most any global temperature (until the oceans freeze), and doesn't account for the sawtooth pattern.*

[*You conjecture that the absorption takes longer than outgassing. But that's in the context of the global temperature, and not the solubility pump. I am unaware of any such physics model that would account for differing rates.*

[*You have highlighted an important feature for the GCMs to replicate. Whatever might account for the glacial epochs, the unsymmetrical cooling and warming must be represented. Three possibly related phenomena appear to be involved -- switching of ocean circulations, changes in total albedo, and changes in atmospheric water vapor concentration. None of these is obviously a cause for asymmetric temperature change, and none of them is sufficient to cause the entry to and exit from the ice ball state. An external source is needed, and the best yet advanced are the Milankovitch cycles. Still, not all the climate changes that Milankovitch cycles would predict are evident, nor can they account for the ice ages.*

[*Read more at http://www.lakepowell.net/sciencecenter/paleoclimate.htm. This may prove to be a jewel of a site -- a breath of fresh air devoid of CO2, of anthropogenics, and of greenhouses, but rich in science. A "global warming" is but a candidate for a future exhibit.*

[*Skepticism is to science as ashes are to the Phoenix.*]

Posted by Alan Siddons | September 12, 2007 10:45 PM

Hugo wrote:

Hi Jeffrey,

Thanks for this. When I first starting looking into the 'War on Weather' a little over a year ago, I was surprised to find that the most widely quoted values for atmospheric CO2 concentrations were taken from an observatory on the flank of one of the world's largest volcanoes. Like most other volcanoes Mauna Loa in the natural course of things intermittently emits CO2, and this odd choice of a potentially severely contaminated sampling site must have presented Keeling and co-workers right at the start of their work with a big problem of local contamination. I don't know how they overcame it, but the widely-published curve of ever-increasing CO2 at Mauna Loa is certainly impressive.

I'd like to see data of modern CO2 concentrations in air from other sites, especially from Vostok or elsewhere in Antarctica. Can you suggest where I could obtain such data?

Cheers,

Hugo

[*RSJ: 10/4/07. Sorry, no. I'm constantly on the alert for such data. The data that are available are shrouded in secrecy.*

[*First, much of what Charles Keeling has produced is for sale only. Second, if you navigate to a website with raw data, you'll find files too large to be downloaded to a personal computer. The data that are available have been have been subjected to smoothing, correcting, baseline shifting, and special calibrating. I have yet to find potentially key data like wind parameters and temperature.*

[*Though I cannot offer proof, my feelings are that Charles Keeling, et al. did account for volcanic emissions, but did not account for Pacific outgassing. The investigators report on calibration applied to account for differences between reduction of identical samples by different sites. My fear is that a similar technique may have been applied to make data from different sites support climatologists' well-mixed assumption. I understand that the Mauna Loa data may have been corrected for El Niño events. Were they corrected for other events?*

[*These problems are most unsettling, but not critical. The Consensus is so far off base on a number of other issues that data sharing doesn't matter.*]

Posted by Hugo | September 26, 2007 10:19 AM

Robert Knowles wrote:

Hello Jeff,

National Geographic Magazine has stepped into the global warming debate. Actually the way they present the information in their October issue there is no debate just a foregone conclusion. A very simple argument is presented: Atmospheric CO2 used to measure 280 ppm and has increased since the industrial revolution to today's level of 380 ppm. They state that human activity accounts for 80% of the increase. Yet I have seen data that the human caused portion of CO2 is very small. I realize from your paper that the argument is much more complicated but the problem with a simplistic argument presented in National Geo is that it is easy to comprehend and unless rebutted, will gain believers. Do you have any comments?

Regards,

Bob Knowles

[*RSJ: I saw the same article. This simple theme pops up from time to time. As we both know from experience, the shorter the answer must be, or the more naive the audience, to a complex question the more difficult (and risky) the answer.*

[*1. Check figure 3.2 from the IPCC (the U.N.'s Nobel Prize Winning Intergovernmental Panel on Climate Change and the voice of the Consensus on Climate) Third Assessment Report. Figure 3.2b supports your question. But Figure 3.2f shows perhaps just over half of the studies on Earth's CO2 concentration, each at a different time period, with momentously more CO2 than at the present. About 11 of those studies show CO2 as high as 10 times the present, and four studies are 20 times as high. Here's a link to the figure:*

[http://www.grida.no/climate/ipcc_tar/wg1/fig3-2.htm

> [*(Background: The data pose a problem with respect to validity not addressed in your question. The Consensus blends data from remarkably different sources without justification. Sometimes the instruments differ, often the location differs, sometimes the data are inferred from surrogate measurements like plant growth. The IPCC doesn't report what the data bands (e.g., 4500-6000 ppm) mean that represent the studies. Are these supposed to be the range over which the concentration varied during the period, are they error bands for the method, or both?*
>
> [*(The Mauna Loa and South Pole data, Figure 3.2a and called the Keeling Curve, are made to overlay by smoothing and calibration using methods not publicly available. The result is in disagreement with the physics of the ocean and atmosphere, i.e., the CO2 gradients. The Consensus relies on the well-mixed assumption for two reasons: to blend data from different locations and to support its conjecture that anthropogenic CO2 accumulates in the atmosphere. That conjecture is essential to its catastrophe prediction, but the accumulation, too, is contrary to the physics of the two fluids.)*

[*2. The Consensus data on CO2 flux has the oceans exchanging about 90 GtC/yr, land about 120 GtC/yr, and leaf water another 270 GtC/yr not always included in the Consensus's budget. That's a total of 480 GtC/yr. Man adds as much as 6 GtC/yr, about 1.3% to 3%, through fossil fuel burning and indirectly through deforestation The total atmospheric CO2 is around 750 Gt, so it is replaced in about 1.5 years, not centuries. The Consensus models the climate as being in equilibrium (but unstable), except for man's (destabilizing) contribution. As a result, it has the natural flux in sweet, delicate balance, and the manmade CO2 building to dangerous levels. It has no physical basis for different physics of absorption of the two species of CO2. The Consensus models the two gases as if they were transported around the globe in separate pipes. See IPCC Fourth Assessment Report, p. 515, Figure 7.3. Instead, the two species of CO2 are irreversibly mixed in both the atmosphere and the ocean.*

> [*(Background: CO2 from fossil fuel has a slightly different isotopic composition than background or natural CO2 for the same reason that carbon dating works. Some species of plants favor one isotope of carbon over another, but that is not near enough to account for the implied difference in physics of absorption.*

[*Rev. 10/15/07. (Because of the seasonal fluctuations in David Keeling's data, and because of his faith in Anthropogenic Global Warming, he conjectured that his measurements reflected processes on the continents. Subsequently he and others supported this theory by measurements showing that the CO2 at Mauna Loa had a somewhat low molecular weight, 14C absent and 13C depleted. Instead, Mauna Loa sits in the chimney of CO2 outgassing from the Eastern Equatorial Pacific. See the IPCC Fourth Assessment Report, p. 523, Figure 7.8, pdf only; not yet available as a webpage. The resulting CO2 rich air is carried aloft in what are called Hadley Cells, which then descend at about 10°-20° latitude, feed into the trade winds, and thence across Hawaii. Much of the Mauna Loa CO2 is about a thousand years old, absorbed at the poles and carried to the Equator by the Great Conveyor Belt, the thermohaline circulation.)*

[*3. You didn't mention warming. Global warming is on-going since the last ice age, since the last glacial epoch, and since the Little Ice Age, and though we are nearing a local maximum on a geological scale, no turn around is yet visible on any scale. We also can prove that warming produces more CO2. Of course, they're correlated! The Consensus just has cause & effect reversed in its model.*

[*The conclusion that either greenhouse gas (for reasons not discussed here) or CO2 is producing runaway global warming is premature, if not a scientific fraud. Piltdown man on 'roids.*]

Posted by Robert Knowles | October 12, 2007 12:24 PM

Ursus wrote:

A source of worldwide CO2 data and graphics:

http://cdiac.ornl.gov/trends/co2/contents.htm

[*RSJ: Trends, along with other links from CDIAC, cited and data discussed* passim *on this blog.*]

Posted by Ursus | October 17, 2007 7:22 AM

John Blethen wrote:

If the thermohaline circulation/CO2 solubility pump is responsible for the millennial time lag between increasing atmospheric temperature and increasing atmospheric CO2 concentration, as the Vostok ice cores purportedly demonstrate, then wouldn't that require that increasing atmospheric temperature at time T would result in increasing absorption of CO2 into the polar oceans at time T, resulting at time T+millennium in increasing outgassing of CO2 from the equatorial oceans and increasing atmospheric CO2 concentration? If so, how could increasing atmospheric temperature at time T lead to increasing absorption of CO2 into the polar oceans at time T? I would expect the opposite to be true since increasing atmospheric temperature at time T would cause increasing sea surface temperature at time T, resulting in less, not more, absorption of CO2 into the polar oceans at time T, resulting at time T+millennium in decreasing, not increasing, CO2 outgassing from the equatorial oceans and decreasing, not increasing, atmospheric CO2 concentration. Am I missing something? It seems to me to be more likely that there is simply a millennial time lag between atmospheric warming and oceanic warming, such that it takes a millennium for increasing atmospheric temperature to result in increasing oceanic temperature and increasing outgassing of CO2. Incidentally, Jaworowski argues that "proxy ice core reconstructions of the chemical composition of the ancient atmosphere are false", page 4 of this link:

http://www.larouchepub.com/eiw/public/2007/2007_10-19/2007-11/pdf/38_711_science.pdf.

[*RSJ: Don't put too much stock in the millennium time lag. One thing the correlation function between CO2 concentration and the temperature anomaly shows clearly is that zero lag is the poorest choice. The millennium lag is one of several possible peaks, suggesting multiple paths in the solubility pump. That would not be an unreasonable model.*

[*The surface of the ocean and the atmosphere are both warmed by the sun and cooled by radiation into space. The surface waters are limited in temperature rise by contact with deep waters, which are not reached by solar radiation. The atmosphere temperature rise is limited by conduction to the surface waters. The ocean dominates the process because the heat capacity of water is so much greater than that of air. How quickly the exchanges occur depends on relative heat capacity (including humidity), greenhouse gases (including clouds), and winds, among other things. How quickly changes occur is evident from the seasonal (10/29/07: and diurnal) experience, and it is instantaneous compared to the millennia time scale you suggest.*

[*Your opening hypothetical has a few technical and semantic problems. The solubility of CO2 in water depends primarily on the water temperature, but not the atmospheric temperature. Next a greater water temperature (at any time, T), regardless of whether increasing or decreasing, would result in a lesser, not greater CO2 absorption.*

[*Stepping over those little problems, the model I suggest for the solubility pump begins with poleward moving, cooling surface waters accumulating CO2. The waters are CO2-saturated, or nearly so, at the poles where the water temperature is fixed because ice is in equilibrium with sea water. Regardless of the global temperature, as long as Earth has ice at the poles the uptake of CO2 is fixed by the solubility curve at the freezing point (and the geometry of the ice caps). For multiple and complex reasons, the cold, CO2-saturated waters feed the thermohaline circulation, descending to depths, undersaturated by higher pressure, for a millennium of process interactions at high pressure. When these waters resurface, they return to atmospheric pressure to outgas at the modern sea surface temperature (SST).*

[*This model operates all along the solubility curve from the freezing point to the current SST at the regions of outgassing. One would expect the effective average SST to be a reasonable proxy for the global atmospheric temperature, a thermodynamic parameter representing global warming.*

[*Nothing, not even* ***The Acquittal of Carbon Dioxide,*** *dictates the form of the model for atmospheric and oceanic circulations and the mechanism of the solubility exchanges. Many models of varying complexity might provide reasonable or sufficient fits with the data. This is manmade, creative, and the modeler's art. The importance of* ***The Acquittal*** *is that every valid GCM, absent anthropogenic forcings, must reproduce the relationship between CO2 concentration and global temperature, whether represented by valid proxies or otherwise, evident in the ice core data.*

[*Either that, or postulate an objective criterion to exclude ice core data from the model domain.*

[*A corollary of this scientific mandate that a hypothesis (or better, a theory or law) must reproduce all the data in its domain is that a valid GCM must hypothesize a solution to the mystery of global warming pre-man, an event or a set of events also consistent with all the data. Without this capability, GCMs will, as they now do, erroneously attribute the background, natural warming to the effects of man.*

[*But for the IPCC, the voice of the Consensus on Climate, no climate crisis would exist. Since its models for the climate do not satisfy scientific rigor, the impending catastrophe is a false alarm.*]

Posted by John Blethen | October 26, 2007 4:23 PM

John Blethen wrote:

Any comments on Jawarowski's arguments that "proxy ice core reconstructions of the chemical composition of the ancient atmosphere are false"? If true this would appear to invalidate ice cores as proxies.

[*RSJ: In context, your quotation from Jaworowski says,*

> [Proxy determinations of the atmospheric CO2 level by analysis of ice cores, reported *since 1985*, have been generally lower than the levels measured recently in the atmosphere. But, *before 1985*, the ice cores were showing values much higher than the current atmospheric concentrations (Jaworowski et al. 1992b). These recent proxy ice core values remained low during the entire past 650,000 years (Siegenthaler et al. 2005)-even during the six former interglacial warm periods, when the global temperature was as much as 5ºC warmer than in our current interglacial!
>
> [This means that either atmospheric CO2 levels have no discernible influence on climate (which is true), or that the proxy ice core reconstructions of the chemical composition of the ancient atmosphere are false (which is also true, as shown below). Jaworowski, Z., *CO2: The Greatest Scientific Scandal of Our Time, EIR Science*, 3/16/07, p. 41.

[*First, a quibble about Jaworowski's logic. If A is true, then A or B is true even if B is lunacy. Since he claimed that both parts were true anyway, he should have used the conjunctive* and *instead of the disjunctive* or.

[*But worse, Jaworowski left out a third branch in his disjunction: (C) the ice core proxy data need recalibrating. He appears to admit C, too, is true when he says,*

> [The CO2 ice core data are artifacts caused by processes in the ice sheets and in the ice cores, and have concentration values about 30 to 50% lower than in the original atmosphere. *Id.*, p. 42.

[*Proxy data by their nature require calibration to a reliable standard, or even intercalibration to make sense of multiple, diverse data streams, especially where no reliable measurement exists. This is exactly what the IPCC has done as shown by its charts and some of its authorities. But care is necessary in drawing conclusions from such calibrated data, which the IPCC ignores.*

[*The Vostok data acquisition and reduction is a major scientific accomplishment, calibrated correctly or not. The data reveal profound patterns in temperature and CO2 concentration, some obvious and some subtle. Both the temperature anomaly and the CO2 concentrations can be mis-calibrated without disturbing the patterns. The data reveal the glacial epochs of the past 0.7 million years, plus or minus something, in both temperature and CO2 concentration. They reveal that CO2 lagged the temperature by a millennium, plus or minus something else. And as shown on this blog in* **The Acquittal of Carbon Dioxide***, the CO2 and temperature relationship is well represented by the solubility of CO2 in water. These results stand, notwithstanding the problems troubling Jaworowski. The ice core data are not, as you wonder, invalidated.*

[*The IPCC errs to conclude from its mix of data from different sources, which it calibrated into agreement in time or intensity, that modern measurements are unprecedented. The IPCC errs to conclude from its manipulated data that atmospheric CO2 is well-mixed. It also errs to conclude from 420,000 years worth of measurements at an interval of 1.5 millennia that the record of the last 50 years is unprecedented. Notwithstanding calibration errors, the confidence level is only 3%.*

[*Jaworowski's conclusion that the IPCC handling of data is bad science is true. The 83 year shift to plot Siple ice core data and Mauna Loa data contiguously is enough to arouse a modern high school graduate's suspicions. However, Jarowowski's diagram (Figure (2b)) is an incomplete reconstruction of the IPCC chart (Third Assessment Report, p. 201, Figure 3.2b)). After all, what counts is just what's in the IPCC Reports. The IPCC shows coherence too with Law Dome, Adelle Land, and South Pole data streams. Did the IPCC calibrate each of the traces into agreement? Probably it did, judging by the 83 year shift. Were the time calibrations all the same? Is there a pattern to the necessary calibrations?*

[*Before any government accepts the IPCC reports as legitimate, the IPCC should be oblliged to make all its data freely available over the Internet in text format. It should also make its entire bibliography similarly available, since it does not quote from its copyrighted sources nor does it cite the origins of its referenced material. A full exercise of the Freedom of Information Act is needed. Let the UN buy the rights to all its references and give them away as a down payment on the $30 trillion it thinks the world should spend for tankage and suppression of a benign and beneficial gas.*

[*Jaworoski's concern about data calibration is a slip knot in the rope with which to hang the IPCC. Assuming it might ever respond, it could argue its way out of the predicament with calibration excuses. This is analogous to what it did when, after first claiming that Vostok proved that CO2 caused global warming, it learned that the CO2 lagged the temperature. It invented the naked model that while CO2 may not have* initiated *global warming, it surely* amplified *it.*

[*Similarly, since the IPCC and the Consensus on Climate have no capability to reproduce or predict* ***climate****, they re-targeted their mission to model* ***climate change****. Accuracy in calibration is less demanding in a model for climate change. This is weasel wording, not science.*

[*Jaworowski's conclusion that the CO2 has had no effect on climate agrees with other analyses. As he observes, large surges in CO2 did not cause a runaway effect. He could say the same thing about the full greenhouse effect. Through ignorance of feedback, a failure to understand stability, and its failure to model the solar wind, clouds and albedo, the IPCC has exaggerated both effects to create a global catastrophe out of whole cloth.*

[*The Consensus on Climate succumbed to the Delicate Blue Planet model learned in K-3, and failed to appreciate and model Earth's conditionally stable state.*]

Posted by John Blethen | October 27, 2007 10:49 AM

Paul wrote:

Mr. Glassman, thanks for sharing your informed views on these topics. I brought your web site to the attention of a science forum that I visit located at this URL http://forums.hypography.com/environmental-studies/13486-co2-acquittal-2.html

If you wouldn't mind taking a look at some of the responses there, I'd love to read your comments on them. I think this kind of debate is very healthy. As a laymen trying to make sense of it all, these discussions are really helpful to me.

Thanks so much for creating this site.

Paul

P.S. I too am a former Hughes employee. I worked for the Space and Communications group in El Segundo for 6 years until they were bought up by GM. Shortly after that, I moved on.

Thanks again,

Paul

[*RSJ: Hypography Science Forums commentary is welcome, and I am happy to pass on the link.*

[*In the commentary, you correctly observed,*

> [He welcomes comments to his work on his web site. I will bring up some of the issues that you folks have brought to the table and see how he replies. Perhaps some of you could chime in there as well. He seems to be inviting reasoned rebuttle or questions.

[*Maintaining a single blog is tasking. Sometimes I run a month late researching and composing an answer, and I have been experimenting with quicker posts with promises to answer. In this blog I can respond more or less in a threaded, dialog style to minimize the burdensome restatements. More importantly, the objective of this initial topic in the* ***Rocket Scientist's Journal*** *is to build a self-contained, lasting resource of scientific criticism on the Anthropogenic Global Warming model. The policy is to post all civil comments and to reply, regardless of credentials. You post at the risk of minor edits and in extreme cases, ridicule.*

[*So, please post any comments or discussion to this site for a fair and honest, if slow, reply. Feel free to extract what you might from anywhere. Links are welcome, but please quote what is important so the reader can follow the argument on a single page. The IPCC routinely relies on citations to papers not freely available or not searchable. This is poor scientific writing, unnecessary, and excessively burdensome on the reader. Copyright material is subject to the fair use exclusion by which it may be freely quoted for the purposes of criticism, commentary, or reporting.*

[*With that said, here are a couple of comments on the postings in the Science Forum.*

[*Some readers have not recognized that* ***The Acquittal of Carbon Dioxide*** *paper analyzes one particular data record, the Vostok ice core data. It is a paleontological record, and so the reader should not expect that the resulting model would have any manmade component. The important new result is the extent to which solubility in water accounts for this ancient record. The analysis has implications for the modern era, of course, because nothing suggests that the science of climate processes changed since Fourier invented the greenhouse model or Keeling his Curve. A massive river of CO2 is flowing around the globe, but just not yet through the*

GCMs.

[*The IPCC GCMs fail to account for the record. They fail to model the circulation of CO2 from the atmosphere to the ocean and return. They fail to model the Great Conveyor Belt (less accurately known as the thermohaline circulation (THC)) as the main engine of CO2.*

[*The IPCC GCMs fail, too, to account for the ice ages (not in the Vostok record) or the glacial epochs (some of which are in the Vostok record). A scientific model that doesn't account for all the data in its domain is doomed to be a conjecture. The GCMs either need to be restated in such a way as to objectively exclude the known record, or be revised to account for that record, even if the triggering events are unknown. That is to be valid, the GCMs need to produce ice ages and glacial epochs, even if the timing is off.*

[*Climatologists have put forth an accounting for the Little Ice Age, resulting in controversy and the disparaging Hockey Stick appellation. What the critics say, and this may have support in the IPCC reports, is that instead of having the models reproduce a Little Ice Age-like event, the climatologists calibrated away the whole event! In the same way, the self-proclaimed Consensus on Climate calibrated away the variations in the CO2 record to make it fit the preconceived notion that the Keeling Curve represents global CO2. See RSJ,* ***"Gavin Schmidt's Response to the Acquittal of CO2 Should Sound the Death Knell for AGW"****, comment from Sunsettommy dated 11/26/07, and posted today.*

[*As to peer review, this is now the coward's refuge. The peer review process is broken, and nowhere so badly as in this field. Climate journals are under control of the Consensus on Climate, and they have a long record of failing to publish criticism. See RSJ,* ***The Acquittal of Carbon Dioxide****, response to Jeff Steward, dated 3/22/07. Furthermore, the peer review process is far too slow. DARPA founded the Internet on the need to improve technical communications. Let it be so. Posting a paper on the Internet is publication.*

[*The observation that the IPCC Reports are not peer reviewed stands as a counterpoint to the claim that its criticism must be peer reviewed. Peer review is never self-review, no matter how many authors might be named. The response that the IPCC Reports make extensive reference to published data and published, peer reviewed papers is to the IPCC's discredit because the organization fails to quote sufficiently from those papers, because the papers are only available for a fee (science for sale), and because the sources often prove unsupportive of the claims. Examples available on request. I look forward to the Freedom of Information Act next year forcing the IPCC to make every citation and data source freely available, on line, and at least Mac accessible. Let the UN pay for any copyright fees.*

[*Thank you for asking InfinteNow to justify some of his accusatory comments. You missed a few of his excesses. He first quotes from the Abstract, then claims that it "opens the entire presentation". Actually, Part I, Introduction does that. He again quotes from the Abstract to a paper critical of the IPCC results, and points to a link to the IPCC Fourth Assessment Report to show that results of the paper are wrong. He accuses me of "classic denialist tactics", a term he freshly minted without example or definition. He objects to the Introduction stating that the climatologists have been unable to reproduce the ice ages and glacial periods, providing two entirely irrelevant links.*

[*The question of the presentation of data is not so much graphical as it is substituting eyeball correlation of snippets of smoothed data for numerical calculations (and presentation) of correlation. The problem is one of quantitative signals in noise. It's not a matter of "doesn't this look convincing held this way"?*

[*InfiniteNow lifts single sentences out of* ***The Acquittal*** *to say they are unsupported. Then he lifts another to say, "It doesn't matter how many times he says the same thing. It's still unsupported and without basis in evidence." He never mentions the Vostok record or the data analysis, though. This is an exquisite example of out-of-context argumentation. It is snide.*

[*For more on the accumulation of CO2 in the atmosphere, see RSJ,* ***"On Why CO2 Is Known Not To Have Accumulated in the Atmosphere & What Is Happening With CO2 in the Modern Era"****. You might also be interested in the following recently posted by me in response to comments on another website.*

> [*The IPCC conjectures that ACO2 is buffered more than is nCO2. The laws and theories of solubility have to change one of two ways for that to happen. The primary law, Henry's Law, says that the solubility of a gas in water is proportional to the partial pressure of the gas in the water, and the constant of proportionality, Henry's Coefficient, is inversely proportional to the temperature. This is the physics of the carbonated drink. The climatologists have modified this law legitimately, apparently, by making the coefficient also slightly sensitive to salinity (at least a hypothesis, perhaps a theory).*
>
> [*The IPCC needs Henry's Coefficient to be different for ACO2 than it is for nCO2. Furthermore, it wants the coefficient to be dependent on the concentration of certain ions in the water so as to create a buffering effect. These could be so, but they are just more conjectures. As it stands, the IPCC model that any kind of CO2 is buffered by the ocean requires a change to pretty well-known physics.*
>
> [*As a part of the IPCC version of ocean chemistry, it shows three models for processes called pumps or carbon pumps in Figure 7.10, Fourth Assessment Report, page 530. http://ipcc-wg1.ucar.edu/wg1/wg1-figures.html, page 11. These three pumps, the "solution pump", the "organic carbon pump", and the "CaCO3 counter pump" are likely to be the quick, the medium, and the slow speed absorption models, respectively. The first has a time constant of one to a few years, and the latter takes 35,000 years to make rocks.*
>
> [*One of these is not chemical. It is the Solubility Pump, which the IPCC calls the "solution pump". This is the mechanism by which CO2 enters the water to create a reservoir of molecular CO2. It circulates around the globe in the Great Conveyor Belt where CO2 is absorbed as the ocean cools and moves poleward, and CO2 is outgassed primarily in the Eastern Equatorial Pacific. This outgassing is about 16 times as great as ACO2 emissions, according to the IPCC. The Conveyor Belt and the pool of molecular CO2 are omitted from Figure 7.10.*
>
> [*The IPCC calls the Conveyor Belt the thermohaline circulation (THC). The name Conveyor Belt doesn't sound so scientific, but*

it's probably a better name. The name THC emphasizes the flow of heat and salt, important but overlooking the crucial CO2 circulation. Many of the IPCC's Global Climate Models represent a vertical column of radiative forcing stuff and have no provisions for lateral flow, which is where almost all of the CO2 circulation occurs.

[*The other two pumps, the Organic Carbon Pump and the CaCO3 Counter Pump, are chemical processes. A minor error in Figure 7.10 has the flow of carbon to the atmosphere connected backwards for the CaCO2 Counter Pump. Regardless, the chemical processes are quite unlikely to react with atmospheric, molecular CO2! Chemical pumps need to access ions. A better conjecture is that the models should be connected instead to a reservoir of molecular CO2 in the water, fed by the solubility pump, and the place where ionization first occurs. In this version, the conjectured pool of molecular CO2 is a buffer that supports the solubility pump and feeds the other two pumps so that all three pumps can operate without interfering with (buffering) one another. This model challenges the notion that ocean chemistry buffers against the dissolution of CO2 in water.*]

Posted by Paul I November 28, 2007 11:30 AM

Earle Stone wrote:

At the urging of my students I reluctantly (not looking forward to the attention from the atmospheric sciences department) put together a talk based off of what I have been able to learn and decipher over the last 4 months. I did not after 4 months of study claim to be an expert, but I did state that I believe myself to be an informed scientific skeptic. I did not get four slides into the talk before an associate professor in the atmospheric sciences department told me to stop speaking; I could not say these things to students; they must enroll in the course being heavily advertised in the school paper. (I ask what other department has the money to advertise an undergraduate course?) It was not my facts, he said that were wrong, but my tone and context that were. I could not, should not doubt the considered judgment of the IPCC.

All I had said was

1) that the planet was warming

2) that NASA has determined that Mars and Triton are warming and the causes could in part and quite likely be in whole the same.

3) that the polar ice caps on the Earth had increased by 1 million square kilometers when comparing satellite images taken in 1986 and 2006

4) that IR absorptions for individual absorbers are not linearly additive, that altitude, latitude, longitude and a host of other factors must be considered, and that IR absorptions are logarithmic not arithmetic.

5) That the considered opinion of Reid Bryson was that within the first 30 meters of the atmosphere that water was one thousandth as important as water. The students asked him to leave so I could finish my talk. (This is the point where he went off) Sad.

I never got to the point that the numbers show that man is currently contributing 0.28% of the GHG emissions of which approximately half is CO2.

I really wanted to engage him in a discussion. I wanted to know how he and the consensus scientists account for atmospheric water. I wanted to know how he accounted for the heat capacity of water. I wanted to discuss and come to know a lot of the issues I am still educating myself on.

I did not expect them to harass the student who put on the talk or send me emails stating that I needed to take their class. I did not expect to be a topic of discussion for another member of the atmospheric science's department during his class and to be so roundly disparaged. I find this last out from the hostess at a favorite restaurant taking a low level class for non science majors.

Heretic or skeptic, denier or blasphemer; I am glad that none are put in jail or burned at the stake anymore. My presentation, without all my supplemental comments is on my website. It needs a lot of work, but I have not had years to polish my presentation. I will however if asked present it again.

Thanks for the comment on waste heat. It is indeed just that, wasteful. We can from an engineering point do better. Even our waste heat is inconsequential in the scheme of solar irradiation.

4 of my returning students next semester are meteorology majors. Should be interesting.

[*RSJ: The true hazard of Global Warming: getting burned by a colleague. The main cause of warming appears to be friction between believers and skeptics.*

[*Shame on the Associate Professor for interrupting your lecture. Common courtesy if not professional courtesy requires that he bring his concerns to your attention in private.*

[*I assume from your description of the event that the Associate Professor was not just defending his department's economic interest in its rice bowl, but instead was trying to control information given to students. That is indoctrination, not teaching, and that, too, is to his deep discredit.*

[*The Associate Professor's action suggests yet another defect in his makeup: he is a believer in a scientific model. He needs some training himself in the principles of science and therefore how to teach science. It is about models of the real world with predictive power. It is not about belief systems. Science is the objective branch of knowledge; it is not about the false attributes of explanation and description, for they are subjective. Nothing is wrong with a scientist having beliefs -- that would be unavoidable. What is wrong is a scientist's failure to separate his beliefs from his science, or even science in general.*

[*I would also quibble with your claim to be a scientific skeptic only because it is redundant. An essential virtue in a scientist is skepticism. As this applies to the Associate Professor, he should have welcomed all expressions of skepticism, especially yours, as challenges to his model of the real world. Scientific models only advance to theories to the extent they can be validated, and responding to skepticism is a start.*

[*He should have raised his hand and the end of your lecture to thank you for a most interesting talk. He should have expressed his general disagreement, and invited the students to enroll in his department's class for what he considers better considered viewpoints.*

[*As an aside, my model for the optimum university emphasizes debate, not lecture. This is the How To Think University, not the What To Think Academy. Proponents of views should be obliged alternatively to defend their views, if they happen to have been revealed, and those of the opposition with equal proficiency. Earned debate points would out rank subject matter proficiency for advancement. The catch here is to create debatable topics, and that's hard to do with algebra and plate tectonics. It's not so hard with evolution, global warming, and the philosophy and ethics of science.*

[*Just as I don't like belief systems, I'm not a fan of expert opinions, even Reid Bryson's. Give him credit instead for the model his has built, the results it has achieved, and the reasoning behind it. In the end, though, there would be no climate crisis but for the IPCC, and the only way to defeat that movement successfully is to debunk its modeling. Alternative theories just won't do. The predictions of all models are on the climate scale, a lifetime in the future. So alternative models will be weighed against the Consensus models according the number of hands raised.*

[*You said "water was one thousandth as important as water", surely intending carbon dioxide to be one thousandth as important as water. [On review of your slides, Bryson's units are feet, not meters.] The number is unimportant and somewhat debatable. The transcendent problem with this observation is that it is in the context of a particular model for climate: the greenhouse effect, which is actually the open-loop greenhouse effect.*

[*I submit that Earth resides in conditionally stable states, not to be upset by a slug of greenhouse gas and its alleged positive feedbacks. It is not well-modeled as a "Delicate Blue Planet" with "tipping points" accessible to man. Fourth Assessment Report (4AR), Box 10.1, p. 775; see also Third Assessment Report (TAR), ¶7.1, p. 421.*

[*Instead, the surface temperature is controlled by the negative feedback of cloud albedo. This is not even recognized, let alone modeled, by the IPCC. The Consensus on Climate discusses feedback extensively, but in the end doesn't even understand the concept. Except for accidental feedback in its radiative forcing GCMs, its feedback loops consist of correlation vectors between elements of the climate. Compare its diagrams of feedback loops, TAR, Figures 7.4, 7.6-7.8, pp. 439-454, with any text on feedback control systems. The IPCC's GCMs cannot model clouds, and so it models albedo as a constant. It does not and cannot close the loop between warming and increased cloud and cloud albedo.*

[*If asked to compute the closed loop gain, the IPCC would be at a loss. With an albedo sensitivity to temperature too small to be detected in the current state of the art, the greenhouse effect may be reduced from the levels predicted by the IPCC by an order of magnitude.*

[*Consequently, fine tuning the contributions of greenhouse gases to global warming is waste heat in the unmasking of the IPCC.*

[*You won't be burned at the stake, but your career will be unless we put out the fire. A well-balanced debunking on the other hand has genuine career promise.*

[*Except for one insertion, the comments above are without the benefit of your presentation. It can be found at http://www.authorstream.com/Presentation/nemostone-32224-Presentation-TAMU-Geosciences-Students-Globa-Slide-1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-Earle-Stone-Dept-Ch-global-ppt-powerpoint/. Here is a full response to your slides. I hope it is helpful.*

[*Slide 2: compares climate changes on Mars and Triton to Earth. Climate modeling by analogy is doomed to be a conjecture. Earth's climate is primarily a thin byproduct of our unique, liquid phase oceans, significant in the ratios of their heat capacities. We are more likely to be visited by a life-snuffing calamity, internal or external (but natural), before we confirm the existence of another Class M planet.*

[*Slide 3: sea ice changes in 20 years. Scientific models are notoriously scale dependent, from thermodynamic, unmeasurable, conceptual macroparameters down to microparameters for chemical reactions and cloud formation. In the middle are the human sensible parameters like those of weather. Global warming is a thermodynamic, macroparameter problem involving global parameters that cannot be directly measured, especially the global mean surface temperature (GMST), and the global mean albedo. If you were to picture Earth's climate (i.e., GMST) on a single slide for most of its existence, you would see that the climate has yet to turn around from the warming from the last ice age 2 Myrs ago. If you did the same thing for the period covering the Vostok record, Earth is still warming from the last glacial epoch 20,000 years ago. A graph for the 2000 year period of the Christian calendar shows Earth warming since the Little Ice Age (erased by the IPCC) about 200 years ago. Viewed on these scales, yes, Virginia, the climate is warming. Ice pack changes over 20 years seem like a weather phenomenon or a minor trend. Does the ice pack breathe in and out as the ozone hole might? Can we extrapolate from sea ice to total ice?*

[*Slides 4-6: infrared spectra. Infrared spectra are sure important, especially if the greenhouse effect is! But the greenhouse effect is held in check, and the spectra are not macroparameters. A net global effective irradiance, absorption, and albedo (i.e., the Bond albedo) should suffice to swamp spectral fine structure considerations. CO2 is not "evenly distributed". That is a major assumption of the IPCC so that it can interpret Mauna Loa data as global. A massive river of CO2 circles the globe, 16 times as great as ACO2, beginning mainly in the Eastern Equatorial Pacific, laying down a plume across Mauna Loa, and gradually working its way along mean atmospheric circulation patterns, dispersing while being reabsorbed by the cooler ocean, descending to depths at the poles for a millennium journey back to the Eastern Equatorial Pacific. The IPCC puts the latitudinal gradient at 10 ppm, but, alas, with no ratio units such as "per degree" or "per 90 degrees".*

[*Slides 7 & 8: two decades of tropospheric and stratospheric temperature anomalies. The parameter of interest lies at the bottom of the troposphere. Don't the stratospheric measurements show the featured upper atmosphere is irrelevant?*

[*Slide 9: ten hottest and ten coldest years and the GISS surface temperature graph. Weather is the noise of climate. It's difficult to get excited about warm seasons, or the number of hot or cold days in some period. Such considerations distract the lay person from the climate problem. They should be pooh-poohed. The full graph, though, is an objective start at making climate estimates out of weather measurements. What is the outlier datum around 2100?*

[*Slide 11: greenhouse gas proportions. Good chart to show IPCC's gamesmanship in pushing aside water vapor. Where does condensed water vapor, i.e., clouds, fit in this budget?*

[*Slide 12: relative greenhouse values of H2O vs. CO2. The data and quote are good, but the slide over-emphasizes Bryson's credentials. Science is never decided by experts, by voting, or by consensus forming. Honor the experts, but don't train student's to rely on them or to compare expertise. The odds are the best of us will be proved wrong one day anyway as science advances, one honored man at a time. Credentials are nice but carry no scientific weight.*

[*Slide 13: Beck's discovery of omitted CO2 data. Beck has made a nice contribution here. See RSJ response to Sunsettommy on 11/26/07 in* ***"Gavin Schmidt's Response to the Acquittal of CO2 Should Sound the Death Knell for AGW"****. Beck shows that the IPCC selected data to fit its model. (Vostok is not spelled with a c.) Contrary to the slide, the Vostok record has profound implications to climate modeling and how the IPCC got so far off track. This should also serve as a fine example to students about cause and effect vs. correlation. The record was the smoking gun for climatologists -- at first. It proved that CO2 causes global warming, just as Keeling, Revelle, and Fourier had predicted. Then, whoops! Someone checked, and the CO2 substantially lagged temperature. Why then are the two correlated? The answer is that the CO2 is produced from the ocean, confirmed by the solubility curve shape of CO2 concentration with respect to temperature. Now we have a new datum to which the GCMs must be faithful - the outgassing of CO2, appropriately shaped like the complement of the solubility curve, and 16 times the ACO2 emissions. The GCMs need a trip back to the drawing board.*

[*Slide 14: Sherlock Holmes on scientific method. Actually, the scientific method has a number of steps in the development of a model, but the ordering is unimportant. Nothing is wrong with a conjecture for which one next seeks to accumulate relevant data. Philosopher Feyerabend rejected the existence of the scientific method altogether, in large part because he conceived of the method as an ordered procedure. He was wrong. A related sin of the IPCC is the selection of data that fit the model. That is another nail for the IPCC coffin.*

[*Slide 15: imperceptible Kyoto protocol gains. Imperceptible is quite right, but not the 0.05ºC. The Kyoto protocol effects would be unmeasurable in the background of variable natural forces. Even if one were to qualify the claim with the stock phrase, "all other things being equal", the effects predicted by current models (the only reasonable source for the 0.05ºC figure) are open loop and are an order of magnitude too great in their temperature sensitivity to greenhouse gases. All other things being constant, the Kyoto protocol presumably will cost $30 trillion for 0.005ºC maximum gain by 2050. To whom should I submit my bill for a finder's fee?*

[*Slide 16: random citations. What is the point of this slide? Slides 15, 16, and 17 stray off into socio-political views of counteracting AGW, and are sure to inflame atmospheric science associate professors. Your presentation was making inroads into showing that the threat was a phantom. Now you give the threat unwarranted credence by considering alternatives such as other uses for the money and the impending ice age threat.*

[*Slide 17: man and the environment. Hang on to the soot. Unlike the imaginary Venus-like state, Snowball Earth is a known state.*

[*Slide 18: energy efficiency and albedo. As I suggested in response to your post of 9/6/07, the best treatment of energy use is economic. Don't ban pollution; tax it and the market will take care of the problem. The albedo analysis is interesting, but incomplete and relatively unimportant for a couple of reasons. You show only surface albedo by surface type without the corresponding relative area of the type. Atmospheric albedo is three times as large as the total, effective surface albedo. Most important is that almost all the surface albedo is static, while the atmospheric albedo has a component proportional to surface temperature. The static part does not contribute to albedo feedback, but the temperature dependent part while quite small nonetheless has a strong negative feedback effect against global warming from any source. It is the latter that puts Earth in a conditionally stable climate state. GCMs on the other hand are unstable.*

[*Slide 19: Benford's solutions to an implicit global warming problem. What does "a 0.5% change" in albedo mean? Is that a percent of the 30%, or does it stand for 29.5% or 30.5%? Albedo estimates run from around 28% to maybe 36% or 37%. How much of the albedo range is measurement accuracy and how much is albedo variation? Regardless, global albedo is barely known to one significant figure. In the end, what counts in modeling is the global mean albedo, which is unmeasurable. But as your text says, a minute change can have a profound effect. These considerations don't affect Benford's planetary defense mechanisms, but they toss IPCC model results to the winds. What is your expected result from putting iron filings in the Arctic Ocean? Is the idea to interfere with the thermohaline circulation?*

[*Slide 20: meddling with a complicated open system. What is the meaning of the word "open"? Open as in open loop? Open as in a thermodynamic model? Is the system complicated, or is the model? Do you contend a successful model for the climate must be*

complicated?

[*Slides 21 & 22: automobile experimental technology. This treatment is simplistic, featuring a small part of the technology as positive with respect to a phantom threat. Instead, teach the student to estimate life cycle costs, or energy usage, or cost of ownership of each candidate. Take the hydrogen fuel cell car for example. Will the hydrogen be produced from electricity generated by low efficiency, free air burning of coal? What are the fuel costs? What are the development costs of the vehicle and of fuel distribution, and how might they be recovered? What are the tax consequences? What are the manufacturing costs at various rates of production? What are the costs in disposal of the fuel cells at the end of life or after accidents? What are the costs or gains as a result of differing performance? We can do the same thing with homes considering the initial costs and life cycle costs comparing well-insulated sealed construction with minimal insulation, well ventilated styles, and here we might add in health costs. The student should learn to make trade studies and to resist the temptation of a single attractive parameter. Knowing how to build a better automobile is for a few skilled engineers. Knowing what questions to ask is a matter of science literacy for everyone. Brilliant engineers cannot compensate for stupid legislators. The converse is not true.*

[*Slides 24 & 25: alternatives to fossil fuels. These are more examples of technological solutions to a purely political problem, and they give credence to the phantom AGW threat. No greenhouse gas, much less benign and beneficial CO2, poses a threat. Sensible technologies to pursue are nuclear power (see next slide) and economical recovery of shale oil.*

[*Slide 26: alternative nuclear technologies. The implication here is that only nuclear fuels are finite. Does the illegible chart suggest that nuclear technology is at some limit of efficiency? Here's a hot link to a legible copy and the full article: http://www.nationalcenter.org/NuclearFastReactorsSA1205.pdf. Why do we care about waste heat? The chart assumes again that CO2-free energy is a positive outcome. The chart implies that storage is problematic. Here is a great place for students to practice honing a healthy skepticism.*

[*Slide 27: we are not claymation chickens. Isn't this the work of Nick Park and Peter Lord, and shouldn't you give attribution? Who are the "we [who] are not chickens"? Remove the politics? Through science literacy we might steer politics into some semblance of rationality. Politics was removed from the scene of energy use and environmental protection under Communism and in the emergence of the Japanese industrialization, one at the expense of economic development, and the other to the great eastward shift of economic prosperity. Meanwhile Eastern Europe and Tokyo Bay became Technicolor nightmares of pollution. Does a positive example exist anywhere for the removal of politics? Is this the familiar call for the chickens to rise up? Are the Kyoto Accords, soon to be the Bali Accords, an example of international political interference, or of chickens rising up? Or, do the chickens represent legislators? We do have "the time" so long as the Legislatures don't panic. And I agree we have strong capabilities. But, to do what? Switch to alternative fuels, or demonstrate why a switch has no climatic effect? This presentation did not set forth any well-defined problem in need of a solution, except to head off the AGW panic and its instigators, which the slides obfuscated.*

Posted by Earle Stone | December 12, 2007 2:59 PM

Derek wrote:

It's with some trepidation I step way out of my league, but, here goes anyway...

I first became aware of this site earlier this summer thanks to Sunsettommy. What a revelation. Previously I've enjoyed Aubrey Mannings Earth Story, and always had a deep interest in nature and natural processes, Alfred Wegener is one of my "heroes".

Mr. Glassman PhD, you appear to me to have had the same effect on our understanding of atmospheric CO2 as Darwin did with Natural Selection.

I've attempted a "layman's simplified overview" of the Solubility Pump. I hope this is OK, and does not mislead. I'd appreciate your opinion please.

http://www.globalwarmingskeptics.info/modules.php?name=Forums&file=viewtopic&t=94

I also have seen some suggestions about graphics.. May I suggest,

1) A graphic of monthly CO2 concentrations across the planet, latitude and longitude, as "measured" by the IPCC. It could be done for example at a 10 degrees latitude, and 20 degrees longitude grid and plotted on Excel using the surface presentation.

2) A similar scaled graphic of what the Solubility Pump predicts.

3) If it can be found, the actual raw data plotted in the same way.

Which graphic would the raw data plot (3) most closely resemble, the IPCC "measured" (1) data or the Solubility Pump (2) .....

NB - I realise there is no, or at least very little raw data available as such, but maybe someone should be persuaded to release such data for this purpose, it is in the real, empirical interest of science after all....

[*RSJ: Thermohaline is a word derived from combining forms for heat and the oceanic term for salt. Since in the IPCC model, the most important factor in AGW is CO2, and since the THC is a major conveyor of CO2, the name thermohaline is rather obsolete. Your diagram and later text makes clear the salt component, but at the first mention you say it carries water and heat.*

[*This is a helpful if dated diagram. There might be an animated version on the 'Net. The one you chose doesn't quite fit the recent*

measurements by Takahashi, as shown by the IPCC in the Fourth Assessment Report, p. 523, Figure 7.8, which has the major uptake of CO2 located around the poles and the major outgassing of CO2 located in the Eastern Equatorial Pacific. Some climatologist should redraw the thermohaline circulation accordingly.

[*You might want to mention a few other things about the circulation. Waters moving poleward on the surface are cooled, absorbing more and more CO2 along the way. Waters at the pole are heavily laden with CO2, helping drive the circulation down and forward. As the water descends, the water becomes under-saturated because of the pressure increase and the loss of heat to the deep waters. When the water is driven back to the surface it is warmed to tropical temperatures, so it is oversaturated and the CO2 is instantly released. This is the soda pop phenomenon with regard to both temperature and pressure.*

[*A major challenge to the AGW model is for the Consensus to justify its conclusion that the Mauna Loa data represent the global concentration of CO2. One thing the Consensus needs to overcome is the location of Mauna Loa in the plume of the major outgassing from the ocean. Therefore, the THC needs to be placed correctly in three dimensions to support the challenge.*

[*The 1/7th calculation is good, but that is due to the ocean alone. Terrestrial flux of CO2 is 20% larger than the ocean (according to the IPCC), so the total life of CO2 is already down to a mean of about 3 years. The figure of 1.5 years includes the exchange of CO2 with leaf water. These figures are all found in the IPCC reports, as is the lifetime formula.*

[*If we could visualize the stream of CO2 through the atmosphere, it should look like the circulation on one of the gas planets. The stream is concentrated at the sources and sinks, and diffuses in between. Spiral stripes circle the globe and move poleward.*

[*On the Global Warming Skeptics web site, the last sentence preceding the Carbon Dioxide Stream figure is garbled. The words up and to are run together in the third paragraph after that figure. Two paragraphs later "too merely indicate" should be "merely to indicate"*

[***The Acquittal of Carbon Dioxide*** *doesn't say anything about volcanoes or the volcanic nature of Hawaii. What it does say is that the plume of the Eastern Equatorial Pacific outgassing flows across Hawaii because of the Hadley cells which rise along the Equator and descend upwind of Hawaii into the trade winds. Also without more study, one cannot say that Hawaii now sits directly in that plume. The plume wanders back and forth seasonally with the winds. Hawaii may actually sit on the edge of the plume so that the well-known seasonal winds shifts directly cause a seasonal shift in the measured CO2 concentration.*

[*For the record, the IPCC calculates the CO2 budget in a special way. It assumes the natural CO2 is in equilibrium. It assumes that the build up at Mauna Loa, assumedly representing global CO2, is therefore all manmade. Since the build-up is only half the total, calculated anthropogenic emissions, man's emission account for half the buildup. This is poppycock -- the 50% figure. ACO2 mixes immediately into the atmospheric reservoir of CO2, slightly lowering the isotopic ratio of 14C:13C:12C. Thereafter, the processes of the solubility pump and ocean chemistry treat the whole mixture alike, with a minor exception for some plants that prefer one isotope of carbon over another. The solubility pump cannot distinguish natural CO2 from ACO2. The IPCC model implies that the solubility of the two is different.*

[*Your suggestion for a graph of CO2 across the planet would be delightful, but alas not realizable today. The data just don't exist. The IPCC reports a data network of just 131 stations, and I know of only about eight of them to be available on the Internet. A world of study is needed even on those data because of the investigators extensive calibration. This graph would be a version of the visualization of CO2 flow around the planet that I suggested. Perhaps this will come to pass through satellite imaging in the near future. Some climatologist should cartoon the concept.*

[*Similar remarks hold for the similar graphics you suggest of the Solubility Pump predictions and the raw data. This is all in the best traditions of science. Time will tell.*]

Posted by Derek | December 17, 2007 1:25 AM

Philip Machanick wrote:

What I am failing to see from all this is why the modern era should be compared to an era where there wasn't a long-term, consistent CO2 pump, putting billions of tonnes of CO2 into the atmosphere annually. In the pre-industrial era, the only time I am aware of that a comparable event occurred is the Permian-Triassic boundary, 251-million years ago, and far too long ago to date temperature and CO2 changes accurately enough to repeat your analysis (massive volcanoes emitted CO2 and lava landed on massive coal fields -- a kind of natural equivalent to what we are doing today).

You are essentially hypothesising that this extra CO2 will somehow disappear, i.e., that the ocean's solubility of CO2 will increase as atmospheric CO2 increases. Or are you claiming that the physics of the greenhouse effect is incorrect?

Could you present us with the physics behind this either way, and explain why the generally accepted number, that the oceans have absorbed about a third of anthropogenic CO2, is incorrect?

If you want a variety of CO2 data, see

http://www.esrl.noaa.gov/gmd/ccgg/carbontracker/

[*RSJ: Your question touches on the core of science - the scientific method. The objective of climatologists is to build a model for the climate with predictive power. It is not to compare now with then. The model initialized for the past must produce the appropriate climate to some degree better than guesswork.*

[*If the model includes the past but fails to reproduce the past, it is invalid. The model must be repaired or discarded. If the past doesn't apply to the model, it must have objective criteria by which it excludes the past.*

[*Your billions of tonnes of CO2 being pumped into the atmosphere is clearly a reference to the nearly 6 GtC attributed annually to anthropogenic CO2 (ACO2), and that certainly was not in existence in the paleontological record. But it is a negligible distinction for several reasons, and it does not cause the GCMs to exclude the paleo record.*

[*o ACO2 is chemically and physically indistinguishable from natural CO2 (nCO2). They differ only in their isotopic ratio, 14C:13C:12C. The two mix immediately in the atmosphere to create a different mixture with an intermediate isotopic ratio. Some plants are known to discriminate (called fractionate) between 13C and 12C, but it is a trivial difference on the scale of climate. No other process distinguishes between the two species of CO2. There is no way to discriminate between old and new CO2 of either species. Differences in 14C might have some bearing, but it has no effect on the carbon cycle.*

[*o The nCO2 outgassed from the ocean (90 or more GtC/yr), let alone the total including emissions from the land (120 GtC/yr and leaf water (270 GtC/yr), swamp the 6 GtC/yr ACO2 contribution.*

[*Your reference to an event 251 million years ago would be an event measured by total atmospheric CO2 concentration on the scale of ice ages. However, that particular one is not included in the 14 events reported by the IPCC. See Figure 3.2, Third Assessment Report, p. 302. In each of these events, the concentration of atmospheric CO2 was substantially larger than the present. About nine of them were an order of magnitude greater than the Mauna Loa data. These events dwarf the catastrophe predicted by the Consensus on Climate. However, no data exists on this ice age scale to examine the relationship between CO2 and temperature, so these events can't affect the GCMs. They are not comparable to the GCM results, or to the small additions made by ACO2. An event measured by total CO2 concentration is not directly comparable to an event measured by a rate of emission any more than the total known oil reserves relates to the rate of pumping. A model is needed to make any connection.*

[*The analysis in **The Acquittal of Carbon Dioxide**, like the analysis in **Solar Wind, El Niño/Southern Oscillation, & Global Temperature: Events & Correlations**, has no accuracy limitation beyond the inevitable limits imposed by a finite stream of noisy, sampled data. The analysis is not a climate model. It assumes nothing about the fate of the ACO2, and it hypotheses nothing beyond the implication that the physics of the past is unchanged.*

[*The analysis does not as you suggest assume that the solubility of CO2 in water depends on the atmospheric concentration of CO2. The analysis instead shows that the natural CO2 concentration in the Vostok record depended on global temperature according to the complement of the known solubility relationship at one atmosphere, which depends primarily on temperature alone.*

[*This discovery from the Vostok record must have a profound effect on global climate models. It is a major, positive feedback not in the current GCMs. If the global surface temperature increases due to added CO2, the ocean will exacerbate that increase with additional CO2. The fact that CO2 in the paleo record lags global temperature is confirmation of the analysis.*

[*This major positive CO2 feedback from the ocean would make the climate unstable. (Note that the word feedback here means what is described above: because of the output temperature increase in the model, CO2 is added back to the input, external driving signal of added CO2.) But the paleo record shows increases in CO2 which did not produce an instability. The inevitable conclusion is that CO2 does not cause the feared greenhouse effect, hence CO2 is acquitted.*

[*I do not dispute the greenhouse effect. What is disputed is a GCM which produces an unstable climate because of the greenhouse effect. Such a model throws into doubt the competence of the modeler because the climate is in a quasi-stable state. Everything known about Earth and other planets is in a quasi-stable state, albeit with a finite life or past changes due to external events.*

[*What the GCMs omit is the stabilizing mechanism that prevents a greenhouse catastrophe. The best bet is the albedo effect. In particular, the stabilizing effect is the tiny but critical dependence of albedo on surface temperature because of clouds. The dependence is known to climatologists, but it is not included in the current rash of GCMs. The models are not capable of reproducing clouds, much less the cloud albedo. If they could, the Consensus would learn that the greenhouse effect is reduced by the closed loop gain, by which any increase in surface temperature reduces the solar radiation reaching Earth. Cloud albedo can reduce the greenhouse effect by an order of magnitude with an albedo sensitivity to temperature too small to be measured in the state of the art.*

[*The physics of why the ocean has not "absorbed about a third of anthropogenic CO2" is the subject of much of the Rocket Scientist's Journal. Here you can read why Mauna Loa does not represent the global CO2 concentration. And why CO2 does not accumulate in the atmosphere. And why ACO2 does not undergo significantly different processes than nCO2. RSJ accepts the IPCC number for the rate of emission of ACO2 and for the rate of CO2 concentration increase at Mauna Loa, but disputes that the cause and effect conclusion about ocean absorption. The nCO2 cycle is not in equilibrium, being absorbed as fast as it is outgassed, while ACO2 is absorbed at a slower rate to account for the Mauna Loa increases. But this is how the climate is modeled in the GCMs. To the extent that global CO2 might be increasing, it is due to, and not the cause of, global warming.*]

Posted by Philip Machanick | December 22, 2007 5:57 PM

Philip Machanick wrote:

> Ah, the cloud albedo thing. This is just a theory which has not been verified by observation.

[*RSJ: Apparently you've heard of it, but disparage it for some reason. If you're an AGW advocate, it must be terribly uncomfortable for*

you.

[*You must dispute one of the following; which is it? Clouds have been observed. Clouds have been observed to reflect sunlight. These two factors establish the existence of cloud albedo. Cloud albedo is not modeled in the current rash of Global Catastrophe Models.*]

Also, if you want to dispute Mauna Loa, you need to propose a better measure. On a quick scan of the sites I looked at, those well isolated from industrial areas roughly the same pattern.

[*RSJ: Why must I propose a better measure, by which I presume you mean a better measure of global CO2 concentration? Why would I even want to estimate such a parameter? The AGW modelers would want to do that. The best analysis of the data available shows that carbon dioxide does not cause global warming, so why look for a better estimate of its global concentration? The best hypothesis about the climate is that the same conclusion is true for the entire greenhouse effect, and including especially water vapor.*]

I haven't bothered to look at the IPCC's version of the paleoclima[]tic record because I don't want to re[-]verify whatever process they went through, hence the 251-milllion years ago case. I've since found another similar case[,] about 55-million years ago, atmospheric CO_2 levels approximately quadrupled in too short a time to measure (given the timescale) and temperatures increased 5-10C, which is in line with the models which show climactic sensitivity of about 3C per doubling of CO_2, +/- 1.5. Either these measurements are wrong or some external impulse is capable of warming the planet 5-10C in a relatively short time (in geological terms).

[*RSJ: The only data worth examining is that relied on or explicitly omitted by the IPCC, as determined from its reports. The only climate crisis is that created by the IPCC and its self-proclaimed Consensus on Climate.*

[*You accept what the IPCC says about the paleo record, then you leave the IPCC to introduce a couple of other geological scale events of unknown pedigree, then return to the IPCC to rely on its models. In this process, you claim to have validated the two events. You make this validation by the AGW-doubling-CO2 conjecture. Even the rash Consensus on Climate doesn't claim that its GCMs are valid on the paleo (i.e., Vostok) scale, much less the geological (Ice Age) scale.*

[*The 251 MYA and 55 MYA measurements may indeed be wrong. Certainly the IPCC climate sensitivity of 3 ± 1.5ºC per doubling of CO2 is wrong. CO2 has an imperceptible effect on climate.*

[*Of course, the other mechanism for climate warming is right in front of your eyes.*]

If you claim that the oceans can readily absorb large amounts of CO_2 to the extent that we needn't worry about any future large-scale emissions, you need a model to explain events like this.

[*RSJ: The IPCC claims that the ocean absorbs about 92 GtC/yr. I rely on IPCC data at every juncture, and occasionally bring in additional but not conflicting data. The objective is to hang the IPCC with its own rope.*

[*The model for the absorption of CO2 is presented in* ***The Acquittal of Carbon Dioxide****. Whether it explains the process is a subjective question, but apparently it doesn't work for you. That's why the scientific method is not about either explanation or description, but about objectivity, validation, and ultimately prediction. The model I presented invalidates the GCMs, and hence their predictions. The Consensus needs to go back to the drawing board.*]

What I don't get from your solubil[]ity claim is that the CO_2 situation was in equilibrium in pre-industrial times. If we are adding CO_2 to the atmosphere and warmer water is _also_ making the seas less capable of dissolving CO_2, why should the increase in CO_2 be _solely_ due to decreased solubility?

[*RSJ: The assumptions about equilibrium are made by the Consensus. I dispute those assumptions. At no time was the global temperature or the global concentration of CO2 known to be in a state of equilibrium.*

[*One of the problems with the GCMs is that they ignore the initial condition of the on-going warming of the climate. They initialize with an equilibrium budget. See Fig. 1.2, TAR, p. 90. Then they compound the error by assuming that natural CO2 is in equilibrium, so to model climate on the margin responding to just Anthropogenic CO2. The on-going warming thus appears to be attributed to the ACO2.*

[*No claim is made here that the increase in CO2 is solely due to anything. The claim is that the oceanic outgassing varies with global temperature according to the complement of the solubility curve. That it did during the Vostok record is shown quite well by the data. Assuming that the physics of the ocean hasn't changed, the outgassing today should be increasing as the climate warms.*

[*The temperature-dependent outgassing is likely what accounts for the record at Mauna Loa because the observatory sits in the plume of the greatest locale of outgassing, the Eastern Equatorial Pacific. The seasonal modulation of the Mauna Loa record is likely caused by the seasonal wind pattern there, moving the plume back and forth across the Islands.*

[*Accordingly, the GCMs need to be repaired.*]

Another point -- in a comment, you mention partial pressure, which I was looking for in the main argument. If your graphs are based on a fixed partial pressure, they are wrong. Solubility will increase with increase in atmospheric CO_2. To complicate matters, the highest CO_2 solubility is in cold waters, most susceptible to global warming.

[*RSJ: Not quite, and fear not. The theory of solubility is that the partial pressure of the gas in the atmosphere and of the gas in the water quickly adjust to be equal. This is called equilibration. We know neither, however.*

[*The IPCC doesn't handle this problem well. It defines pressure in the TAR Appendix in terms of Pascals (Pa, one Newton/meter^2) on p.*

869 and in bars (bar) or millibars (mb) (p. 870), and it provides the unit conversion factors. But then it discusses the partial pressure of CO2 (pCO2) in the dimensions of concentration, parts per million (ppm). TAR, p. 200. This is common in the literature, too, and it may have led to your confusion.

[*The tropical waters, and especially the Eastern Equatorial Pacific, are the most affected by global warming, and not as you say, the cold waters. This is because so long as Earth has ice caps and liquid surface oceans, the cold waters are in equilibrium with ice and so are at a constant temperature of about 0ºC.*

[*Whether the physics of solubility might be better modeled with partial pressures or with such refinements as salinity is irrelevant to the* ***Acquittal of CO2****. The known physics of solubility is sufficient. It represents the curvature of CO2 with temperature better than any polynomial fit. The solubility curve is the equivalent of about a fifth or sixth degree polynomial on the Vostok data set. However, the solubility curve extends beyond that domain of the ice core temperature measurements, so it has none of the physically impossible results that polynomials give beyond that domain.*

[*This curvature of CO2 concentration with global temperature needs to be incorporated in the AGW models, even if a better model for solubility might be possible.*]

Both the 55-million year ago and 251-million year ago episodes included substantial changes in ocean chemistry (in once case, extreme acidification, the other, anoxia). Both are hypothesized to have been caused by massive volcanic eruptions which set fire to massive fields of fossil fuels -- events not too dissimilar in character to what is happening today. Unfortunately when you go back this far in the past, timescales are fuzzy, and detailed chemistry a bit of a black art. And of course there are other critical differences from today, e.g., contin[]ental configurations, so you can't read too much into comparisons. But there have been at least 2 events of this character with similar consequences ...

[*RSJ: The 251 MYA event corresponds to a notable mass extinction, now popularly attributed to an asteroid. The 55 MYA event corresponds to the Palaeocene/Eocene Thermal Maximum (PETM). I have been unable to find either event or the modeling you describe in the IPCC reports. Apparently these events are part of neither the GCMs nor their data on which the IPCC and the Consensus rely, but are someone else's model. Therefore, these results are irrelevant to the promised global catastrophe, and not worth debugging. Just out of curiosity, where is this modeling published, and does it corroborate the GCMs? Are you the one who is doing the hypothesizing that you mention?*

[*I don't see how the volcanic activity and the fires might be similar to the modern state of the climate. ACO2 is swamped by nCO2; CO2 is swamped by water vapor; the total, the greenhouse effect, is controlled by the sensitivity of albedo to surface temperature to a negligible level. On the other hand, some severe volcanic activity appears to have snuffed out much of the life on Earth.*

[*A note of caution: when reviewing data, be sure that it has not been calibrated into agreement with other data or with some preconceived conjecture. The IPCC and the Consensus are guilty of this often unacceptable practice. This is especially true of the calibration of proxy data, and in the matching of CO2 records from around the globe.*]

As for delta T leads delta C in ice cores, if the original impulse is a variation in the earth's orbit or solar output, you'd expect that. Since the CO_2 greenhouse effect is logarithmic in the increase in CO_2, you wouldn't expect a rapid increase in CO_2 once the external impulse was removed; assuming the sun in effect cools, all you need is for CO_2 solution in the oceans to speed up faster than new CO_2 can cause further warming. Also, if this process is happening gradually as would have been the case for the Vostok record, other CO_2 sinks come into play -- plants grow more rapidly for example, as the atmosphere warms and the CO_2 supply increases. I haven't looked at anyone's model for this but all of this seems plausible.

[*RSJ: The greenhouse effect is not logarithmic. The greenhouse effect enhanced by feedbacks as modeled by the IPCC and the Consensus in their radiative forcing models exhibits a logarithmic effect. TAR, p. 93. You left out all the qualifiers. In fact, the greenhouse effect, much less the CO2 effect, is negligible. The IPCC left out the albedo dependence on surface temperature.*

[*Your plausible scenario is not the IPCC's, so it's not worth debugging.*]

To make a case, you really need to look at the physics of solar heating and account for the fraction of delta T can reasonably be model[]ed by changes in the sun (Milankovitch cycles etc.).

[*RSJ: For the IPCC treatment of the Milankovitch cycles and the CO2 lag, see TAR ¶3.3.2, p. 203. The IPCC says that indeed some event other than an increase in CO2 must have initiated the warming periods, but that the CO2 amplified it. That amplification is not evident in the data. The IPCC says that the Milankovitch cycles are "****Implicated*** *as a key factor" in global climate. Bold added. They are not a cause because some warming periods expected from the orbital variations failed to materialize in the climate record. As to changes in solar radiation, the IPCC and the Consensus have found those changes to be too small to account for observed climate changes. TAR, Summary for Policy Makers, p. 9; 4AR, ¶9.5.1.1, p. 705.*

[*The IPCC considered another factor arising from changes in the sun - variations in the solar wind. It dismissed this phenomenon for lack of evidence. The evidence, though, exists. See* ***Solar Wind, El Niño/Southern Oscillation, & Global Temperature: Events & Correlations*** *for the evidence the IPCC overlooked.*

[*Note that correlation here properly supports a physical model for cause and effect.*]

You also need to include all the other feedbacks (reduced albedo from reduced ice, increase GHW from water vapour).

[*RSJ: Why must these be included? How would they help debunk the AGW conjecture? Once the GCMs are repaired to include the*

already discovered omissions, such as temperature dependent albedo and temperature dependent outgassing, then they might be ripe for disclosure of other errors.]

I'm a bit suspicious of something that looks like one theory fits all in somethi[n]g as complex as the climate. Also, correlation isn't causation: just because the curves fit well, it doesn't mean they tell the whole story. The scale could be wrong (implying you have a good first order fit, but are missing amplifying feedbacks), or the effect which fits well is what has happened long-term but doesn't represent the very anom[a]ly we're trying to model. Or you could be lucky and the errors cancel out.

[*RSJ: You need to replace your suspicion with skepticism. That is the scientific way.*

[*You knock down straw men of your own creation. You won't find a universal theory proposed here. Nor will you find here an example of correlation substituting for causation. Nor will you find a claim that curves tell the whole story.*

[*You misunderstand what is presented here to date. So far you have seen only analyses of errors and omissions by the IPCC and the Consensus on Climate*.]

Posted by Philip Machanick | December 23, 2007 8:33 PM

David Ellard wrote:

A comment on the timescale of ocean mixing of dissolved CO2. A figure of 1200 years is quoted for the timescale of MECHANICAL mixing i.e. as a result of ocean currents.

However CO2 is also biologically processed. Marine organisms fix dissolved CO2. When they die, their bodies sink to the ocean floor in a timescale vastly faster than 1200 years.

If there was a mechanism to oxidise the organic carbon on the ocean floor back to CO2, this might conceivably vastly reduce the mixing timescale.

I have no figures on this, but the obvious mechanism for CO2 return is rotting.

[*RSJ: The measured lag, as stated in the **Acquittal of CO2**, has several peaks from which a characteristic number, 1073 years, is a fair representation and produces a desirable organizing of the scattered data. It tends to support the figure of 1200 years quoted from Wikipedia, which is used in the article only in passing discussion of the Carbon Dioxide Stream of Figure 23.*

[*The timescale of the mixing helps build the model for the **The Acquittal of CO2**, but it is not critical. The shape of the CO2 concentration with temperature is now known from the paleo record, and it shows that the ocean governs the concentration of atmospheric CO2 through well-known solubility effects. That this is connected to the THC (thermohaline circulation) is hypothesized from the CO2 flux volume, the uptake and outgassing spots on the globe, the geometry of the THC, and the time lag, measured and known from other sources.*

[*The Conveyor Belt as a phenomenon for further study should prove a fertile field to plow. For an interesting animated discussion of the circulation, see http://www.cru.uea.ac.uk/cru/info/thc/. The animation has the circulation well-focused at the polar waters where the circulation begins its characteristic descent, but it is not well-defined where it surfaces. This circulation needs to be integrated with what is known about the flux of CO2, as shown for example in the Fourth Assessment Report, Figure 7.8. Also the weight of dissolved CO2 might prove as significant as salinity in propelling the circulation.*

[*In any case, the THC is a physical/mechanical transport system, but not chemical. The entire circulation structure provides a dynamic reservoir for ions and molecules, a moving lunch counter and garbage disposal for chemical reactions from surface waters to the depths around the globe. To some unknown extent, those chemical reactions should have an effect on the concentration of molecular CO2, principally for the outgassing return to the atmosphere. However, those chemical reactions should not have any first order effects on the net rate of CO2 flux between atmosphere and ocean. The IPCC notions that chemical reactions put backpressure against the dissolution of CO2 in water, and that chemical reactions are age-dependent causing the life-expectancy of CO2 in the atmosphere to be decades to centuries, challenge basic physics.*

[*Expecting a first order model for the climate to be affected by details of the biological processes is unreasonable. A net flux between the physical/mechanical sphere and the biological sphere will suffice as at most a second order effect*.]

Posted by David Ellard | January 17, 2008 4:45 AM

Earle Stone wrote:

Thanks for the feedback on the presentation. Some of your comments were addressed in the talk and not included on the slides. Much was not and is a valuable addition. With your permission I would like to include your comments as extra slides for the online posting as well as a basis to improve and focus content.

[*RSJ: Feel free!*]

The talk was designed to invite skepticism and excite dialogue. Unfortunately the Associate Professor's rhetoric foreclosed any

debate, dialogue, or discussion. And I agree with your statements regarding that this rhetoric also forecloses on science and the true purpose of University.

Yup, gotta reference Nick and Peter. Without sympathetic colleagues it is difficult to get this kind of feedback and improve the talk. You have been of great help.

Clearly, as you state and I believe, what we need is to end the agenda driven panic and implement engineering solutions to economic problems. Solutions that may be neither easy nor simple, but most certainly doable and easily driven by economic forces.

[*RSJ: If a problem is truly economic, trust capitalism to find an optimum solution within the boundary conditions of the infrastructure and a free (i.e., auction-driven) market place. In that context, to work through an entrepreneurial endeavor, sound engineering and economics would be university goals of choice.*

[*On the other hand, the notion of public ownership of the air and water, by which the government taxes our effluents, is attractive. That puts pressure back on the capitalism to fix problems. Our approach too often has been over-kill: to ban, killing whole industries or forcing them off shore to pollute at will, and shifting problems to the criminal justice system. Half a problem solved is rarely any solution at all.*

[*Most hypothetically speaking, if the AGW problem were valid, then a carbon tax might be just the ticket. The problem is that legislators don't have the scientific literacy to see through the fraud, and getting them to tax is like pushing a car downhill. They just gather speed. Science literacy, healthy skepticism, and a little economics need to be K-12 goals. After the twelfth grade, most legislators are beyond reach.*

[*Legislatures are the poorest defenders of capitalism. So in today's environment, the technician needs to be extra sure the problem is both real and well-defined.*]

There is a quote by Patrick Moore's (former president of Greenpeace) appearance on Penn and Teller's Showtime program that I am considering to replace the first slide and provide a better statement of problem and provide a focus:

"There's really no need anymore to spread guilt and fear about the environment. The solution side is to try and figure out how to do things better. Not to have campaigns against everything in the world, but rather to have campaigns in which you are shifting from the way you did things before into doing things in a new way that still provides the goods and services we need but to do so at less cost to the environment."

With this in mind and your comments the presentation should find the focus and a clearer statement of the problem.

Again, Thanks very much.

[*RSJ: You're welcome.*]

Posted by Earle Stone | January 18, 2008 4:00 PM

Earle Stone wrote:

The satellite data showing the trends in temperature change from stratosphere to lower troposphere indicates that the only temperature we need to worry about is the surface temperature. Vincent Grey has already discussed that the methodology used is inadequate to declare a "crisis". A recent peer reviewed article by Patrick Michaels and Ross McKitrick looks into the data quality of the surface temperature readings and indicates that the increase is overestimated and may be overestimated by as much as 50%. A lay version of the paper is available at

http://www.uoguelph.ca/~rmckitri/research/jgr07/M&M.JGR07-background.pdf

The full paper published in The Journal of Geophysical Research

http://www.uoguelph.ca/~rmckitri/research/jgr07/M&M.JGRDec07.pdf

In the end it is not the CO2. I fear no number of facts will change the minds of believers.

[*RSJ: McKitrick and Michaels 2007 is the next response in a dialog with the IPCC, which responded negatively to McKitrick and Michaels 2004 on the same subject. 4AR, ¶3.2.2.2, p. 244. McKitrick and Michaels 2007 correct an allegedly minor error in their 2004 paper, but conclude "the IPCC gridded data is [sic] contaminated by extraneous socioeconomic signals, a finding that is confirmed and strengthened in the present paper." P. 3. This gridded data set Climatologists use to initialize certain GCMs (4AR, ¶8.2.7, p. 607), and it comprises, at least at times, daily temperature data (4AR, ¶9.4.3.2, p. 698). Strictly speaking, that would not be interpreted to be daily temperature* ***trend*** *data, which McKitrick and Michaels analyze. Writers sometimes refer to temperature trend data simply as warming.*

[*Upon a couple of reads through the full paper, the math has all the earmarks of a sound and thorough approach, with a couple of exceptions. A full expert opinion would require copies of the data sets and a couple of months to reproduce the analysis. In any case, here are some problems with the 2007 paper.*

[*McKitrick and Michaels should have provided a link to temperature trend data in the IPCC reports, one which would show the importance the IPCC attaches to those data. The IPCC discussion seems rather thorough, mostly concentrated in 4AR, ¶3.2.2, pp. 241-245, but in the end troubled and inconclusive. The IPCC does report somewhat ambiguously that socioeconomic factors are statistically*

insignificant in the warming record. Clearly, the IPCC wants the best record of surface temperature possible just on scientific principles. What is not clear is the IPCC concern and need for accuracy for initializing its GCMs, as opposed to its concern for a warning system for impending global catastrophe.

[*McKitrick and Michaels model the following equation:*

> Suppose there are i = 1, . . ., n locations around the world at which temperature is measured. In each location i a climatic trend Ti over the interval t = [1979:1-2002:12] in C/decade is sought, but what is actually measured is an observed trend θ_i:
>
> $$\theta_i = T_i + f(S_i) + g(I_i),$$
>
> where f and g are functions of unknown form, S_i represents surface processes and I_i represents inhomogeneities.

[*First, temperature and temperature differences are directly measurable as with thermometers and infrared sensors. I am unaware of any transducer that responds to temperature trends, so trends would not be "actually measured." Therein lies a problem.*

[*Temperature trend data are calculated from temperature data. This is called filtering or, in part, smoothing. Done properly, which is not terribly difficult, it can have the effect of reducing the variance (variability or noise) inherent in raw data. But if the trend calculations use overlapping raw data, for example, as in running averages, the filtering introduces color into the noise. Also where data samples are subject to common errors, as in calibration or registration errors, the measurement errors become colored. With colored noise, trends in the noise compete with trends in the underlying, or systemic, process to be analyzed. Where the sampling interval is itself noisy, as with synchronization or missing data problems, calculated trends have another component of error not present in the raw data. Engineers might recognize this problem in filtering as the "differentiation of noise", which good signal processing techniques assiduously avoid. A trend is a time or spatial rate involving the ratio of two random variables, and the analyst needs to be careful that the denominator is nearly noise free, as with perfect clocking of samples. The ratio of two random variables can behave quite badly, and can even be unstable.*

[*A second problem with filtering and smoothing is that samples of filtered random variables are likely to be correlated even when the raw random variables were not. The smoothed, nonzero population growth rate of nematodes is correlated with the smoothed, nonzero temperature trend.*

[*Good data reduction practices are not to rely on statistical analysis of filtered data. Instead, one should apply the statistical methods to the raw data, developing a model for the underlying system process, then extract the rate from the process model. I would like to see McKitrick and Michaels repeat their analysis on the raw temperature data, then apply their techniques to the removal of geographic, socioeconomic and other factors.*

[*In favor of McKitrick and Michaels work is the strength of their results. That is, their results should hold even if they had worked from raw data. On the other hand, the correlations, fits and rejections would have been even stronger had they used raw data. Additional information might be extracted from the data using the preferred method. The set of significant parameters might be brought even more into focus.*

[*Similar observations apply to the set of parameters McKitrick and Michaels chose for their surface processes and inhomogeneities. They used derived parameters calculated as rates, as in parameters expressed per capita and per unit area. The validation of their technique lies in their success, but I would have preferred a study including the numerators and denominators comprising the rates as independent variables.*

[*At the end of their analysis, McKitrick and Michaels compare "distributions of temperature trends" for (a) IPCC surface data, (b) satellite (Microwave Sounding Unit) tropospheric data, and (c) IPCC data filtered again by their results to remove residual socioeconomic effects. Figure 3, p. 11. They say, "The effect of removing the local distortions as estimated by the model is to bring the shape of the surface data distribution more closely into line with that of the satellite-measured lower troposphere data".*

[*First, a quibble to get the vocabulary right: the curves of Figure 3 are densities, not distributions. A distribution always runs from 0 to 1 (100%), increasing monotonically (i.e., maybe flat for awhile, but never decreasing). More importantly, as the number of samples increases (for real, physical variables) the distribution curve will converge to the underlying process distribution. That is not true for the densities!*

[*Also, the shape of the density histograms can be quite sensitive to the selection of the histogram interval. A little change in registration or a different selection of the width can have a sudden and unexpected effect on the shape of the envelope. This is not true for distribution histograms. But even at that, histograms are unnecessary, and an ill-advised source of data reduction error. What should be calculated is the cumulative number of samples less than or equal to every point on the abscissa, requiring just* n *calculations for* n *points.*

[*McKitrick and Michaels appear to have fit curves to the densities. They should recalculate using the cumulative number of samples for each parameter, fit a cumulative distribution curve to the cumulative plot, then differentiate the cumulative distribution curve to portray a density curve. Some of the wiggles in their density curves should disappear as data reduction artifacts. Comparing the distribution curves for the three parameters can remove other artifacts, such as insignificant tales. The curves should be compared for the bulk of the data, usually clustered around the means.*

[*McKitrick and Michaels say,*

> While we do not assert that the "true" average land-based climatic warming trend is 0.17 C/decade, our analysis does suggest

> that nonclimatic effects are present in the gridded temperature data used by the IPCC and that they likely add up to a net warming bias at the global level that may explain as much as half the observed land-based warming trend. P. 11

[*I was unable to verify that the IPCC used gridded temperature **trend** data to initialize their models, as McKitrick and Michaels imply. A more reasonable initialization for the GCMs should be the local temperature, not the temperature trend.*

[*However, I do agree that wherever the IPCC has neglected a warming influence, that has contributed improperly to its model and to its conclusions about anthropogenic influences. The best example with the most profound effect is the IPCC's neglect of the cloud albedo.*

[*I agree with you that CO2 is not guilty. And changing the minds of believers is somewhat a pointless task. We must work on the subset of believers who forgot that science is not about belief, but about predictive power. We must work on the subset of climatologists who forgot that scientific models must fit all the data in their domain before making predictions. The IPCC is a ponderous, barnacle-covered supertanker with a cargo and crew of believers and non-skeptical scientists. Science is the tugboat that will eventually turn it.*]

Posted by Earle Stone | January 23, 2008 11:20 AM

Philip Machanick wrote:

Accusing me of straw targets ... why do you keep comparing my arguments to the IPCC? I am not the IPCC. A couple of points ...

[*RSJ: I compare your arguments to the IPCC reports for the reason I gave you in response to your post of 12/23/07: "The only data worth examining is that relied on or explicitly omitted by the IPCC, as determined from its reports. The only climate crisis is that created by the IPCC and its self-proclaimed Consensus on Climate."*]

You say you are not using pure correlation. I don't see anything else in your analysis. If atmospheric CO2 is increased from a source such as industrial combustion, the equilibrium point of CO2 in the air vs. the sea ought to shift to a new higher concentration in the sea, and a new higher concentration in the air. Why is there a problem with this?

[*RSJ: Our exchange so far hasn't used the phrase "pure correlation".*

[*Here's a restatement of some relevant points from my modeling that you have failed to discover. The solar wind affects Earth's mean cloud cover. The surface temperature also affects cloud cover variability, causing a dominant negative feedback that controls Earth's surface temperature. The concentration of CO2 is dominantly controlled by the ocean temperature.*

[*Your model of ACO2 increasing the air and sea concentration of CO2 is fine. It's just trivial. Consider the amount of ACO2 added to the amount of nCO2 added, and the share of CO2 as a GHG compared to water vapor. Then consider the possible effects of any GHG increase in light of the negative feedback of cloud albedo. Finally consider how little the GHG can affect climate compared to a little change in average cloud albedo. The AGW conjecture is way down in the noise.*]

You say "The 251 MYA event corresponds to a notable mass extinction, now popularly attributed to an asteroid." The evidence for an asteroid is weak, e.g. see

> Koeberl K, Farley KA, Peucker-Ehrenbrink B, Sephton MA (2004). *Geochemistry of the end-Permian extinction event in Austria and Italy: No evidence for an extraterrestrial component*. Geology 32 (12): 1053-1056.

Here's a good reference to compare the Permian-Triassic event with one where there was strong evidence for an impact event:

> Tanner LH, Lucas SG & Chapman MG (2004). *Assessing the record and causes of Late Triassic extinctions*. Earth-Science Reviews 65 (1-2): 103-139.

You'll see the scenarios are very different -- the PT event resulted in a larger increase in atmospheric CO2 off a lower base, with catastrophic environmental consequences (see particularly p 124).

[*RSJ: Your reference contradicts your summary:*

> [Nevertheless, carbon exchange between the oceans and atmosphere and carbon drawdown by weathering on land limits the buildup of volcanigenic carbon in the atmosphere [citation]. … Moreover, abundant data exist that suggest that the Late Triassic atmosphere had a greatly elevated (over 2000 ppm) CO2 content prior to the CAMP [Central Atlantic Magmatic Province] eruptions [citation], which decreases the sensitivity of climate to changes in atmospheric CO2 [citation]. Considered thus, the impact on the atmosphere of CO2 from CAMP emissions was probably much less than that required for a significant disturbance of global climate and the biosphere. Tanner, et al, p. 124.

[*The base of CO2 appears to have been about 2000 ppm, unless you have some other meaning for "off a lower base" it was much higher than today's 370 ppm or so. Tanner et al also say,*

> [This invalidates the hypothesis of Beerling et al. (2002) of massive CO2 release as the driving mechanism of the K-T extinction. Tanner, et al., p. 121

[*Your link of PT event -> atmospheric CO2 -> catastrophe, presumably the mass extinction, is contrary to your authority.*]

I am not trying to nitpick or defend the IPCC. I am exploring the outliers, to see if the science is substantially correct. That means looking at evidence that the science may be predicting less catastrophic change than may happen as well as the opposite. The P-T

event is one case that suggests the IPCC is erring on the side of optimism.

If you really want to engage with the science, you have to look for error where you least want to find it not only where you would be happy to find it. I would not be happy to find that AGW is a much worse problem than the IPCC predicts, but it would be stupid not to investigate this possibility.

[*RSJ: You're trying "to see if the science is substantially correct"? By that you must mean the IPCC science! The answer to that is in. The IPCC is wrong on its modeling and its ultimate conclusions. According to Tanner, et al., CO2 at five times the present concentration could not have caused the PT event. Also five times as much CO2 did not produced the IPCC's feared "tipping point" leading to irreversible changes or catastrophe.*

[*Science postulates models with which to make predictions. The models first must fit all the data in their domain, or they are invalid. The GCMs are invalid. What the GCMs do predict is unprecedented and unreasonable in light of what is known about the past and about physics. Science needs to put a moratorium on this hunt for errors pending the next generation of GCMs. Meanwhile, government spending and voting to reduce carbon emissions should be seen as contraindicated, another pseudoscientific folly. Carbon dioxide is benign and beneficial. It is a greening agent, and probably the optimum effluent.*]

Posted by Philip Machanick | January 30, 2008 10:46 PM

John, Channel Isles wrote:

Dr Glassman, your writings are fantastic.

[*RSJ:Fantastic?*

[1. conceived or appearing as if conceived by an unrestrained imagination; odd and remarkable; bizarre; grotesque: fantastic rock formations; fantastic designs.

[2. fanciful or capricious, as persons or their ideas or actions: We never know what that fantastic creature will say next.

[3. imaginary or groundless in not being based on reality; foolish or irrational: fantastic fears.

[4. extravagantly fanciful; marvelous.

[5. incredibly great or extreme; exorbitant: to spend fantastic sums of money.

[6. highly unrealistic or impractical; outlandish: a fantastic scheme to make a million dollars betting on horse races.

[7. Informal. extraordinarily good: a fantastic musical.

[Dictionary.com Unabridged, (v 1.1)]

I must confess I do not understand them all, but as a businessman I can 'read between the lines' and pick up the overall themes and conclusions which appear to be far ahead of anything the IPCC are capable of!

[*RSJ: The IPCC is quite capable of understanding the papers posted here, and should have had the work done itself. Its Reports and the authorities it cites are rich in excellent science, written by many capable scientists. Its conclusions, though, are unwarranted, and they have distorted many of its authorities. Its promotion of what is no more than an incomplete conjecture for public policy is unethical.*

It does grate though that you refer to the IPCC as 'the Consensus'. The IPCC total at most 2,500 scientists (how many are just researchers has not been established). But even that number is insignificant compared to the 19,000 scientists that have signed against AGW organised by Frederick Seitz. Link. http://www.oism.org/pproject/

[*RSJ:A repeated theme on this blog is that there would be no climate crisis but for the IPCC, at least no rational crisis, nor any crisis which man could reasonably avert. The IPCC and its supporters promote anthropogenic global warming by models with gaping holes, and rely instead on an alleged consensus to promote political action.*

[*In an address to a Climate Action Summit in 2006, Governor Arnold Schwarzenegger said,*

[the debate is over, and the science is in, and it's now time for action.

[*The IPCC declares without limitation,*

[Scientists have determined that human activities … are responsible for most of the warming observed over the past 50 years.

[*The IPCC comes right up to the edge of saying AGW is supported by a consensus. When it gets close, it resorts to a form of passive voice, saying its models are in agreement, or that a consensus exists within its models. On many fine points, the Reports clarify that no consensus exists, implying that on the larger scale consensus has been reached. IPCC supporters are not so cautious. See:* Just what is this Consensus anyway?, which says "the IPCC report contains the consensus". It continues with four "main points", of which the first three are unqualified:

[The main points that most would agree on as "the consensus" are:

> [1. The earth is getting warmer (0.6 +/- 0.2 ºC in the past century; 0.1 0.17 ºC/decade over the last 30 years (see update)) [ch 2]
>
> [2. People are causing this [ch 12] (see update)
>
> [3. If GHG emissions continue, the warming will continue and indeed accelerate [ch 9]

[*http://www.realclimate.org/index.php?p=86. See also, The Wall Street Journal vs. The Scientific Consensus. http://www.realclimate.org/index.php/archives/2005/06/the-wall-street-journal-vs-the-consensus-of-the-scientific-community/. Statistical analysis of consensus, which "proves" the existence of the consensus by showing that 100% of peer reviewed papers in N Oreskes' sample "support the consensus view that a significant fraction of recent climate change is due to human activities." http://www.realclimate.org/index.php?p=80. Of course, what the survey supports is that peer-reviewed journals simply do not publish non-conformist papers.*

[*On 6/7/05, eleven prestigious science academies, including the National Academy of Sciences for the United States, signed an agreement calling for "prompt action to reduce the causes of climate change". Its note section begins,*

> 1 This statement concentrates on climate change associated with global warming. We use the UNFCCC definition of climate change, which is 'a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods'.
>
> 2 IPCC (2001). Third Assessment Report. We recognise the **international scientific consensus of the Intergovernmental Panel on Climate Change (IPCC)**. Bold added.

[*The RSJ reference to the IPCC report as the Consensus on Climate is well-supported. It should grate on everyone, scientist and politician alike, and every businessman, that a scientific body would rely on a consensus, real or alleged, to validate a conjecture, and to promote political action based on such a model. Its own authorities recognize that science does not advance by consensus-forming, but nonetheless the IPCC does so to teach politicians that there is no dispute, and "the science is in".*

[*As fallacious as science by consensus is, a counterargument based on a contrary consensus is equally fallacious. That applies to Seitz's list of 19,000 and Senator Inhoff's list of 400. Consensus forming is no part of the scientific method, and it should not be given credence by assembling a counter consensus. Also, that argument is off-target, disputing what the IPCC does not expressly state.*

[*Consensus formation is inevitable. It's human, and it happens all the time - until some individual comes up with a better model, or disproves the existing model. The old model is then discarded, or modified to accommodate the new. That is part of the scientific method.*

[*What is missing in the Schwarzenneggers, Gores, Hillarys, Obamas, and McCains is not scientific skill, but minimal scientific literacy. It's the kind of stuff that should be taught in K-12 to give citizens some protection against charlatans and quackery.*

[*The rest of your comment is omitted because it amounts to about 600 words copied almost verbatim from Tom Harris and John McLean,* The UN Climate Change Numbers Hoax*, 12/14/07, which is your citation to http://canadafreepress.com/index.php/article/968. The authors touch on Mann's Hockey Stick reduction, adopted by the IPCC in its Third Assessment Report, and criticized by McIntyre and McKitrick. Based on that reduction, the IPCC downgraded the Medieval Warm Period and the Little Ice Age to, at most, regional phenomena. See TAR, ¶2.3.3, pp. 133-136. McIntyre and McKitrick seem to have had some effect. In the Fourth Assessment Report, the IPCC restores some credibility to these epochs, adding dates and a definition for the Little Ice Age, and here and there dispensing with quotation marks around the terms. Regardless, the acceptance of an erroneous Mann reduction is not a fatal flaw to the primary results of the IPCC model.*

[*{Rev. 7/8/09} IPCC relied on Mann's Hockey Stick reduction in its Third Assessment Report. TAR, Figure 2.20, p. 134. It revisited Mann's analysis, and discussed the controversy around that reduction, adopting the name "hockey stick". AR4, ¶6.6.1.1* What Do Reconstructions Based on Palaeoclimatic Proxies Show?*, pp. 466, 471. IPCC's prose is inconclusive, but it provides a set of such reductions in a composite graph, including the Hockey Stick and extending back an additional 300 years. AR4, Figure 6.10(c), p. 467. This set includes a longer lasting peak at the same value as the present. The current peak is 0.7ºC occurred in 1992, lasting one year, but the previous peak, also at 0.7ºC, lasted 7 years, 990 to 997. Between the Reports, Mann had said*

> A large number of such reconstructions [Mann et al., 1999; Jones et al., 1998; Crowley and Lowery, 2000] now support the conclusion that the hemispheric-mean warmth of the late 20th century (i.e., the past few decades) is likely unprecedented in the last 1000 years [Jones et al., 2001; Folland et al., 2001]. Preliminary evidence [Mann and Jones, 2003] suggests that such a conclusion may well hold for at least the past two millennia (Figure 1). Mann, M.E., et al., "On Past Temperatures and Anomalous Late 20th Century Warmth", Eos, vol. 84, no. 27, 7/8/2003.

[*The new reconstructions of the Fourth Assessment Report disagree with Mann's conclusions. They come within a couple of decades and some probability of disproving Mann's claim about the present temperatures being unprecedented in the most recent millennium. The current warm spell is not unprecedented in the past millennium or so, and IPCC has repudiated Mann's Hockey Stick reconstruction altogether by dropping it.*

[*Moreover, the entire span of the new set of reconstructions is microscopic, relatively speaking. It spans 1,300 years, less than the average interval between samples in the half-million-year Vostok record. That record shows the present warm epoch, plus four previous warm epochs within 450 Kyrs that were between about 2ºC and 4ºC warmer than the present. The Vostok record supports a model that the global surface temperature has a floor and a ceiling due to natural effects, and that the present warm spell should warm by another 2ºC to 4ºC due to natural causes. And under that model, to say that the recent warming over the last century or so is due to man is a*

misattribution. {End rev. 7/8/09.}

[*Harris and McLean contains neither an alternative climate model nor a significant contradiction to the IPCC model. Their article deals mostly with the numbers game of consensus counting. It is a non-scientific distraction from this blog's developing objective: exposing the IPCC AGW model as invalid, based on its own data and omissions.*]

Posted by John, Channel Isles | March 22, 2008 7:39 PM

John, Channel Isles wrote:

> OK, so if this site is devoted to analysing the IPCC AGW models how are they doing?
>
> Has Dr. Glassman's CO2 pump been fully included in the IPCC models yet?

[*RSJ: The answer won't be known or knowable until the Fifth Assessment Report, likely another five years in the future. In the meantime, modelers will be free to experiment, publish in closed journals, repair their models into some semblance of consistency, and announce the new Consensus in the 5AR.*

[*Even then, don't expect the GCMs, built around vertical cells and radiative forcing, to be able in any straightforward manner to model the three-dimensional behavior of the THC or the global average cloud cover which is dependent on the hydrological cycle. Efficiency demands that climatologists come to appreciate the effects of cloud albedo first, for then they would lose any ardor for faithful modeling of the carbon cycle and the feedback-controlled greenhouse effect.*]

I note 2 conflicting articles. 1 study (Dec'07) saying "comparing the composite output of 22 leading global climate models with actual climate data finds that the models do an unsatisfactory job of mimicking climate change in key portions of the atmosphere."

Link. http://tinyurl.com/3bjtpm

Another saying "A new study by meteorologists at the University of Utah shows that current climate models are quite accurate and can be valuable tools for those seeking solutions on reversing global warming trends."

Link. http://tinyurl.com/5kqv95

The 2nd article claims "Most of these models project a global warming trend that amounts to about 7 degrees Fahrenheit over the next 100 years." Is this more highly selective reporting of the results, namely the highest 1 or 2 outcomes whilst not reporting the lowest 22 runs which predicted zero or no warming!

Finally just to take issue with one of your replies to my above post. There's no way the layman can understand good science as we're not scientists! We can't understand the elements and reactions or have the maths skills to validate risks or statistically analyse the validity of results.

[*RSJ: Laymen aren't asked to be scientists. In this case, however, laymen are asked to make sacrifices on the scale of their economies, their health care systems, their national defense, and any other program competing for a major part of a nation's budget, in response to an unvalidated scientific model. You should have or should develop, or insist your government representative have or develop, a minimal scientific literacy, one sufficient to put that model on public trial. You should learn the differences between the grades of scientific models -- conjectures, hypotheses, theories, and laws - and the ethical imperative for scientists to urge public action on nothing less than an established theory. You should come to appreciate why the Anthropogenic Global Warming model is at most a mere conjecture. And why it is a scientific fraud growing to unprecedented proportions.*

[*But you have lots of time. No one is coming across the border to kill all the laymen. It's only capital -- your money and your industries -- perfectly expendable as waste.*]

Secondly while I fully understand 'consensus' is not valid ground for a science law it is a valid basis for countering the politicians claims there is a scientific consensus. The Oregon/Frederick Seitz Petition puts together 19,000 science accredited individuals who in their knowledge (better than the layman's view) think AGW has no basis and the political 'solutions' also have no validity. That is very valuable, not as a science in itself, but as a social and political tool to counter the AGW's strongest arguments.

[*RSJ: Good point. But as entertaining as the game may be, it's not match play decided by how many fans sit on each side of the field. Nor is it to be decided by a clutch of clever sportswriters. It's the strength and skill of the players in the contest.*

[*To the extent you make decisions by voting, you're on a random walk to doom and ruination. The same is true of decision-making by expert opinion. What is needed is objectivity, and that requires facts, not opinions, and the light of day.*]

Posted by John, Channel Isles | April 14, 2008 3:56 PM

John, Channel Isles wrote:

> RSJ,
>
> Many thanks once again for your answers. Really appreciated :)

I fully understand 'consensus' whether argued by the AGW crew or the 'Naturals' is 'a game' but this is a game - it's politics - and that's where the battleground is to be won or lost. This game on who 'owns' the territory is essential politically although it has no scientific merit undoubtedly.

But unfortunately scientific merit itself does not even decide much among you scientists from what I can see!

There are still scientists devoted to the AGW argument that think there's scientific evidence to support AGW, which they obviously believe is more than a 'theory'. Further there are 'Naturals' like Roger Penske Sr. that believe man does have a localised weather impact (clearing forest for agriculture effects localised weather) and may have some/a small impact (i.e., as little as 1% on hurricanes) at global levels even if ultimately he doesn't believe man is having any great impact whatsoever.

I've seen the 'scientific' argument at every level. From me arguing with fellow citizens on forums, scientists arguing with scientists and politicians arguing with politicians. And at each level each side seems to have some facts to back their case even if like you, I believe their facts are based on claiming a lame duck can fly!

That's 'the game' at the moment. The science on the Naturals side may be considerably stronger but there's enough uncertainty in the scientific debate for the AGW crew to hang on by their fingernails even if the likes of Al Gore now needs 3 Range Rovers for security, avoids any public debate on the issues and bans the Press from his $3,000 a minute green speeches to avoid answering any questions.

Pathetic a scientific debate is reduced to this, and I'm sorry to bring the politics onto this page but that's where it's at!

Until we get another 2 years of global cooling and someone establishes once and for all CO2 is having no effect on atmospheric temperature.

Your concerns about the economic impacts of Government actions I could write chapter and verse on. From Ethanol fuels to CO2 taxes to alternative energy. Those debates are political too though I have to say are far easier to expose the flaws in.

[*RSJ: Let's characterize the problem. A group of scientists claim, based on modeling, that a calamity affecting all humanity is looming, and urge world governments, and especially the US, take immediate and extremely expensive action. Science would thus drive politics. The two fields, politics and science, are inextricably linked. What is the appropriate response for politicians?*

[*On the 4/18/08 morning show, Fox News Channel carried an interview by Brian Kilmeade of California Governor Arnold Schwarzenegger, including the State's actions to reduce greenhouse gases. Brian asked the Governor's thoughts about the lack of consensus on climate warming, and what he knew that the critics did not. His answer: "I think that they know the reality, I think they are just trying to protect business." He might have meant "trying to protect American industrial might", but that hopeful interpretation is unlikely in light of the popular blacklisting of AGW skeptics. E.g., Greenpeace's exxonsecrets.org; realclimate.org.*

[*The proponents of AGW have scored political points by (1) proclaiming a false consensus, and (2) libeling all opposition by association or by ad hominems. Politicians in the majority need a sensitivity to both these practices. One prerequisite is a modicum of science literacy, which seems surprisingly lacking even among highly honored scientists.*

[*The AGW model is invalid, and it fails minimum scientific standards for use as a basis for public policy. Principles of science transcend any particular field of science, and must be satisfied. A model must fit all the data in its domain just to be a sensible conjecture. To be a hypothesis, I say it must advance at least one non-trivial prediction. A model has predictive power when a significant prediction is validated by experiment, and then it is a theory. And only then is it ethically suitable for public action.*

[*GCMs are scientific models, but they neither fit all the data nor contain a testable proposition, except the catastrophe a century from now. Short term discrepancies are weather, or are chalked up to climate variability. The models cannot be qualified for use to prevent the disaster. Politicians need enough science literacy to demand the AGW proponents validate their GCMs before any government acts on them.*

[*Beyond the missing prerequisites of science, the IPCC reports fail for abuses of data, inconsistencies, omissions, misperceptions, and exaggerations. Here's a sampler:*

> [*Abuse of data: (a) The IPCC calibrates CO2 concentration records from different sites to make them globally similar. (b) The IPCC compares records reduced to anomalies by subtracting a baseline value for each record, and then discarding the site-dependent baseline values.*
>
> [*Inconsistency: The IPCC claims that CO2 is an LLGHG, a long-lived greenhouse gas, persisting in the atmosphere variously for decades, centuries, and even millennia, however the residence time by the IPCC formula and data is between 1.5 and perhaps 5 years.*
>
> [*Omissions: (a) The effects of the solar wind, and the creation of cloud cover, and hence total cloud albedo, from atmospheric water vapor are not simulated. (b) The IPCC treats natural CO2 and water vapor flux as being in equilibrium (and forcings) instead of temperature dependent (and feedbacks). (c) The IPCC does not compute closed loop feedback gains. (d) The IPCC ignores that Mauna Loa sits in the plume of the ocean CO2 outgassing, and that Vostok sits in the Antarctic CO2 sink. (e) GCMs do not simulate the thermohaline circulation (THC). (f) The IPCC computes an open loop greenhouse effect instead of the actual closed loop greenhouse effect.*
>
> [*Misperceptions: (a) The IPCC considers feedback to be the correlation between signals. (b) The IPCC treats biological processes in the ocean as a bottleneck to CO2 solubility within relatively stagnant vertical columns, when CO2 is absorbed dynamically across the surface of the ocean. (c) Without recognition, much less justification, the IPCC treats the solubility of*

natural and anthropogenic CO2 in water as different.

[*Exaggerations: (a) The IPCC claims the industrial era CO2 concentrations are unprecedented in the last half million years, a claim with a 3% confidence limit. (b) The IPCC necessarily claims that atmospheric CO2 is well-mixed, yet admits to the contrary that latitudinal CO2 gradients are an order of magnitude greater than longitudinal CO2 gradients. (c) GCMs substitute key physical process simulations with parameterizations that apparently are no more than static, stationary, statistical estimates.*

[*In addition, the IPCC reports rely on thousands of citations to papers only available for a fee, and generally without sufficient quotations. The Freedom of Information Act should be imposed.*

[Reputable *scientists would have discovered these problems for themselves, and never have left them unresolved before going public. None of these questions is inherently incomprehensible to politicians. They need to know enough to demand the IPCC respond to each, and disallowing the IPCC the political defenses of consensus or expert qualifications.*]

Posted by John, Channel Isles | April 16, 2008 4:43 PM

Charles Standley wrote:

Dr. Glassman;

I have stumbled across a thought that may or may not have merit. I understand many basic sciences, but I don't have the resources to put any theoretical numbers behind my thought. It has to do with the absorption of infrared radiation by not just CO2 as we think of it, but by isotope mix. There are 18 common configurations of CO2. Each of them absorbs a varying spectra of IR. My initial epiphany came from a debate I had with someone about cosmic rays not causing increased heating. Then I remembered the conversion of nitrogen 14 to carbon 14 in the atmosphere. Carbon 14 is the only radioactive atom of the six isotopes of carbon and oxygen. I wondered what balance the atmosphere would achieve in the CO2, if the increase in carbon 14 in CO2 would have any noticeable effect.

Anyone have the proper background and resources to provide a valid theory on this?

My fear of this beyond a minor change in atmospheric chemistry is that fossil fuels are so old, the carbon 14 is almost nonexistent in coal, oil, and natural gas. However, we have a push for biofuels which will in my opinion, increase the carbon 14 levels of CO2 in the atmosphere. Since it isn't a linear effect, I fear increasing the output of CO2 with carbon 14 may actually have a noticeable change in the greenhouse effect.

[*RSJ: You're correct about 14C being absent in fossil fuel emissions. Also those emissions are low in 13C, and hence in δ13C, the ratio 13C/12C. The IPCC recognizes these facts as signatures of fossil fuel emissions. TAR, ¶3.1, p. 188. Nevertheless, the IPCC uses only δ13C to estimate the content of ACO2 in the record of CO2 concentration. For a discussion of δ13C see* Stable carbon isotopes in atmospheric CO2, *TAR, Box 3.6, p. 207. In the Fourth Assessment Report, the IPCC shows Global emissions in GtC/yr between 1970 and 2005 and δ13C from Mauna Loa for the years 1981 to 2005 on a single, dual ordinate graph. 4AR, ¶2.3.1, Atmospheric Carbon Dioxide, Figure 2.3, p. 138. (These two references introduce the IPCC reliance on the isotopes of carbon. At the same time, they are also examples of abysmal scientific practices by the IPCC, but beyond the scope of and distracting from your questions.)*

[*The source of the Mauna Loa data is Keeling, C.D., A.F. Bollenbacher, and T.P. Whorf, 2005:* Monthly atmospheric 13C/12C isotopic ratios for 10 SIO stations. *In: Trends: A Compendium of Data on Global Change. Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, TN, http://cdiac.ornl.gov/trends/co2/iso-sio/iso-sio.html, dated March, 2005. A contemporaneous paper prepared by S. C. Piper for the Scripps Institution on the same subject, and involving the same participants, discusses the 14C signature. See* A Study of the Abundance and 13C/12C Ratio of Atmospheric Carbon Dioxide to Advance the Scientific Understanding of Terrestrial Processes Regulating the GCC, *October, 2005, http://www.osti.gov/bridge/product.biblio.jsp?osti_id=861630. It discusses development of the ratio δ14C (14C/12C), claiming "unprecedented precision of 1 to 2‰" on 5-liter samples, but without a comparison, calling it an "underutilized tracer" and suggesting it might be used for three other applications, including "constraining rates of fossil-fuel burning".*

[*So your question about whether the increase in 14C due to a shift to non-fossil fuels would be noticeable, the answer is almost. The state of the art appears to be that 14C measurement is just now becoming accurate enough to be useful, given the sample size. The small and gradual increase in 14C due to the shift should require further improvements, or much larger samples.*

[*Relative to your other question, whether the shift to non-fossil fuels would make a difference in the greenhouse effect, the answer is no. The shift would cause ACO2 to become more like natural CO2, where the prevalence of 14CO2 is about one molecule in a trillion. http://hypertextbook.com/physics/modern/half-life/. So if 100% of ACO2 had the signature of natural CO2, 14C would have no measurable greenhouse effect just due to its abundance.*

[*Natural CO2 would need 14C to be 10 billion times as prevalent, 1% of CO2, for it to be significant as a greenhouse gas, assuming it had a significantly different absorption spectrum. But in lieu of actual data, the odds are that the spectrum of 14C compared to, say, 12C, would be minute, comprising slight line shifts or small lines on the skirts. The absorption spectrum of CO2 in general is quite different than that of H2O, but the effect is arguably second order in the total calculus of the greenhouse effect.*

[*Also, CO2 is only one fourth of the greenhouse effect. It is far less important than H2O as a greenhouse gas, in the ratio of about 60% for water to 26% for CO2. The ACO2 is quite small compared to natural CO2, about 6 GtC/yr compared to 90 GtC/yr from the ocean plus 120 GtC/yr from the land, which is only 3% (per year), not including leaf water exchanges.*

[*Lastly, the IPCC greatly exaggerates the greenhouse effect. It computes an open loop effect, ignoring the reduction by the closed loop gain through cloud albedo feedback. The error I predict could easily be an order of magnitude.*

[*Bottom line: you needn't worry about the greenhouse effect, much less CO2, much, much less 14CO2 from non-fossil fuels.*]

Posted by Charles Standley | April 16, 2008 6:21 PM

John, Channel Isles wrote:

Back to science. The Vostok data shows CO2 outgassing lags temperature rise by 400 to 1,400 years. And the Carbon Cycle, or time CO2 takes from being taken up in colder oceans, to being outgassed, is approx 1,000 yrs.

Therefore has the current high CO2 levels come from the recent mini ice age of 800 yrs ago?

I've also seen another mention of CO2 levels (outgassing) from oceans on a much shorter cycle of 9 months to temperature change, is this sea surface outgassing?

[*RSJ: Ocean currents are rather ragged, comprising eddies or gyres, probably in three dimensions, and possibly random jumps or turbulence in the THC between quasi-stable states, like a tightly twisted cable. The current patterns are long term averages, subject to daily variations, and especially poorly characterized below the surface. Such natural randomness, to say nothing of the major measurement errors, will color the delays, turning any sharp lines into multiple, broad correlation peaks. So one shouldn't put too much emphasis on a specific number for the millennium delay.*

[*The Vostok data show two or three CO2 lagging peaks around 1000 years, and any one of them is a far better selection than any smaller lag, including any CO2 lead term. However, the states of ocean and atmospheric currents at the time are not known.*

[**The Acquittal of Carbon Dioxide** *is an analysis of the Vostok record, and that is not suited to resolving a 9 month cycle. If a nine month signal appears in the modern atmospheric CO2 and temperature cross-correlation, you might look for a previously unrecognized, deep current to account for it.*

[*In the outgassing concept developed from* **The Acquittal**, *ocean currents collect CO2 all across the ocean surface, effectively instantaneously in equilibrium given by the solubility curve. When the currents descend at the poles, they are in equilibrium with ice, so they are saturated with CO2 at 0 ºC and one atmosphere pressure, regardless of the global average surface temperature at the time. As the currents descend, they become undersaturated because of increasing pressure, and stay so until rising to the surface. The outgassing would then equilibrate according to the solubility curve at one atmosphere and for the hottest ocean temperature at the time of the outgassing. In this model, the outgassing concentration depends on the climate at the time, and not at all on the age of the water.*]

Posted by John, Channel Isles | April 16, 2008 9:28 PM

W. C. Jordan wrote:

I believe it would also be useful to have a discussion of how the evaporation, condensation, rain cycle serves to move heat from the surface of the earth to the upper atmosphere where the heat is dissipated by black body radiation. The cold rain scrubs CO2 from the atmosphere and carries it into the oceans and lands where it becomes utilized in a related cycle. How much cooling does a hurricane provide? The pounds of water that are cooled (BTUs of energy) by a hurricane is astounding.

CO2 is utilized by plant life to create cellulose predominantly in the ocean. When these plants die and decay in an anaerobic environment they fall to the bottom and become covered by sand and inorganic sediment. Over years they are compressed and eventually become oil and natural gas deposits. A great deal of the CO2 also becomes bound into minerals in the ocean and on the lands.

There are a tremendous number of interconnected cycles that feedback, and cause the cyclical characteristics of climate. The energy from the sun and cyclical variation in the sun's energy generation, and various influences that cause the absorption of energy from the sun, is likely the underlying and overriding driver for climate cycles and variations. Man has little to do with this cycle.

The public needs to know of these complexities, so they are not sold a bill of goods by politicians.

[*RSJ: You are correct that these are important considerations for heat and material flow over the globe, but at what level? Scientific principles and models are strongly scale dependent. Generally a science can be divided into micro, meso, and macro scales, where the meso scale contains the sensible processes, and the other two are too small and too large, respectively to be perceived, unaided, by the senses. This is natural in light of the fact that science is a branch of knowledge, the objective branch, and it began with what could be sensed and progressed through the technology of instruments and logic.*

Often the scale has a profound effect on the nature of successful models, and may prevent models at one scale from having any predictive power at a different scale. Linear models will work here, but not there. Deterministic modeling and stochastic modeling may have to change places.

All the questions involving climate concern macroparameters, and this by definition is the domain of thermodynamics. The key parameters are global averages of the surface temperature, planetary albedo, which throttles the incoming, short wave solar radiation,

and the opacity of the greenhouse gases, which resists the outgoing, long wave radiation. All of these parameters are known by estimation, based on sampling, but none is directly measurable. The relationships between the parameters are known by the laws of thermodynamics and conservation, and by thermodynamic models relating heat and capacity.

The IPCC posed macro level questions about Earth, and elected to model the climate by the radiative forcing paradigm using modified weather simulators. The latter are meso scale devices, and have progressed into non-linear and even chaotic (i.e., scientifically worthless) models. To effect their radiative forcing methodology, climatologists first presume that Earth is in a state of equilibrium under natural forces. Then it computes how man perturbs the natural climate by his actions, especially his emission of CO2 into the atmosphere, amplified by the positive feedback of water vapor. Then it assumes the climate response is the sum of these two responses, the natural plus the anthropogenic.

The IPCC's addition of the natural and manmade responses to estimate the climate is an application of the principle of superposition. But superposition applies if and only if the model is linear, and the IPCC admits its models are not linear! The method on its face is not valid. The IPCC cannot bridge the gap to answer its macroparameter questions with mesoscale models. Its modeling effort has demonstrated no predictive power. The work needs to be refocused on accounting for the dominant features of the climate - the quasi-periodic ice ages, interlaced with natural global warming. Until that is demonstrated, and without reliance on superposition, using the models for public policy is unethical.

Much of what is sensible in the weather involves processes far beyond man's power to affect, either to intensify or mitigate. Storms and draughts, floods and dust bowls, extreme heat and cold, exact a terrible toll, and might threaten extinction. These are the phenomena that dominate weather forecasting. They motivate the questions about climate, which is the average background upon which weather rides. The sensible parameters are heat and cold and cloud formations, plus El Niño and La Niña, tornados and, as motivates you, hurricanes. But on the macroscale, the latter are mere eddy currents in the heating and cooling of Earth. These are below the horizon, as we say, irrelevant to the thermodynamics of Earth. Such regional, local, and temporal effects, including the particular distribution of heat in the troposphere as you point out, so far have no predictive value for climate models. They are lost in the large scale averaging into macroparameters.

Your interests in the rain cycle, including the transport of CO2, and the slow oceanic sequestering of carbon are good, but they need to be placed in the context of the question of the day. The IPCC has sounded its public alarm over CO2 using models that are faithful to neither the carbon cycle nor the hydrological cycle, and worse. They have no predictive power.

Even small variations from the Sun would have a major impact on climate. But from what is known for the last million years or so, such variations have not been the climate driver. Nor have the Milankovitch cycles; nor has the greenhouse effect. In my model, ice ages are cloudless, locked by surface albedo. But warm climates are driven by cloud albedo, a high loop gain, negative feedback that mitigates the positive greenhouse effect, including CO2 effects, and even the Milankovitch effect, to smidgens. Cloud albedo thereby stabilizes Earth's more temperate climate, but is itself modulated, most likely by gamma rays coupled with solar cycles.

This would be my opening message to the politicians and the public.]

Posted by W. C. Jordan | July 19, 2008 6:28 AM

John, Channel Isles wrote:

Hello again RSJ,

The Earth's climate involves huge forces of sun and ocean and atmospheric content. So surely this 'warming issue' all boils down to how much CO2 is in the atmosphere and how much it can effect temperature?

[*RSJ: To say "huge forces of sun and ocean and atmospheric" is to wax poetic. Instead of poets, though, you might want to follow the lead of thermodynamicists. Imagine an envelope around Earth and try to account for everything that passes through that envelope, coming in or going out. The Sun is first in power, followed distantly by gravitational forces and cosmic rays. Neither the ocean nor the atmosphere contribute mass or energy to the reckoning through the envelope, but instead deflect or absorb incoming energy, modulate ancient heat left from Earth's creation and added heat absorbed, and they react to the warming by distributing the absorbed energy in a most complex manner.*

[*However, the technical issue does not boil down to the CO2, and that is true by a wide margin. It doesn't even boil down to greenhouse gases, notwithstanding that they have a blanket effect that staves off the frozen planet phase of the ice ages.*

[*Nor does it boil down to the Sun, although a relatively tiny change in solar energy could drive Earth into a state of ice or toast.*

[*No. What governs our climate within the bounds of our measurements and deductions is albedo, the reflection of solar energy by clouds in the warm and generally livable phases like the present, and by the surface in the frozen states of the ice ages. This is a powerful, dynamic, negative feedback, yet to be modeled in global climate models used to predict catastrophe. It has a latching effect to hold Earth in its existing state, whether cold or warm.*

[*Because the GCMs don't model dynamic cloud albedo, they incorrectly account for the greenhouse effect. The put the greenhouse effect in open loop. In reality, that loop is closed through cloud albedo. Surface warming increases specific humidity, which then increases cloud cover. This is a dynamic feature of the hydrological cycle, missing in the GCMs which only provide an arbitrary statistical estimate of cloud cover.*

[*In today's benign climate, changes in the long-term average cloud albedo too small and too obscure to be measured, mitigate warming from any cause by about an order of magnitude. That includes variations in solar power, the Milankovitch effect of distance to the sun, as well as the greenhouse effect. The power of minute changes in albedo to regulate climate against large changes in the concentration of greenhouse gases is easily seen by recognizing that albedo alters incoming solar radiation, which is two orders of magnitude more powerful than the outgoing, longwave radiation from Earth. In control system theory, this is known as the closed loop gain.*]

And the parallel question, if you want to move Earth's climate (in particular temperature) you better have some big numbers to effect a big climate [change]!

[*RSJ: Except, for example, where a large loop gain exists, as in the case of cloud albedo, as explained above.*]

What is so difficult therefore about finding answers or is my question/s totally naive?

CO2 is 0.0038% of Earths atmosphere. That's not 'a big number'. That's a trace element.

[*RSJ: More like 0.038%.*]

What is CO2's forcing (warming) ability? Its infrared forcing is only 2 small sections of the entire infrared spectrum. Compared to water vapour or Methane, which punch 20 to 40 times their weight, CO2 is a weakling.

So CO2's influence on climate is a tiny trace element that can hit as hard as an ant's eyebrow (sorry for the description, my maths are to follow shortly!).

As there's a Total of 750 Gigatonnes of CO2 in Earths atmosphere, with 6Gt per year attributed to man, surely it's not rocket science to estimate pretty precisely how much this trace element CO2 can affect Earth's temperature (i.e. the Max possible heat CO2 can contain as a greenhouse gas) and also man's contribution?

My amateur kitchen climate science is shameful in this Forum but I'm doing my level best. Thanks for your help :-)

[*RSJ: A few more adjustments to your model are needed to answer your questions. Even though the absorption window for CO2 is limited as you suggest, the net effect of CO2 is about one fourth of the greenhouse effect, and the balance is almost entirely due to water vapor. The Intergovernmental Panel on Climate Change (IPCC) leverages CO2 to have a greater effect by taking into account that global warming increases specific humidity, so its total greenhouse is CO2 plus the added water vapor from the induced warming. This it recognizes, in part correctly, as the positive feedback of water vapor. It recognizes the increased water vapor from global warming, but for the purposes of its added greenhouse effect and not for its added cloud cover effect.*

[*Another positive feedback that the IPCC ignores is the outgassing of CO2. The ocean is a natural source of CO2 15 times as great as man's fossil fuel emissions. If CO2 were to warm the climate, the ocean surface would also warm, and the flux of CO2 from the ocean would increase. This is a positive feedback caused by the solubility of CO2 in water, which decreases with increasing temperature. Like the cloud cover problem with the GCMs, this effect is not simulated at all. As a result, the GCMs do not correctly simulate either the carbon cycle or, more importantly, the hydrological cycle.*

[*So, CO2 has a greater effect than you might guess because of the positive feedbacks of reduced solubility and increased water vapor. Increases in these greenhouse gasses always have a net positive effect, but it is much less significant to global warming than one might suspect, to the point of being all but irrelevant, because of the overwhelming negative feedback of cloud cover.*

[*Within the last half billion years covered by climate studies, atmospheric CO2 has sometimes been as much as 20 times the present level. The reasons are unknown, but no catastrophe ensued. Atmospheric CO2 has repeatedly increased at substantial rates in recovery from ice epochs, again with no runaway effect or perceptible, induced warming. Net, CO2 increases are an effect of global warming, not a cause.*

[*The answer to your question about the warming computation lies in the climate sensitivity as defined by the IPCC. It defines that parameter to be the rise in global average surface temperature caused by a doubling of CO2. The IPCC gives a best estimate of 3ºC, with a 66% confidence range of 2ºC to 4.5ºC. However, as described above, the IPCC makes these computations using models without CO2 positive feedback from the ocean, with positive feedback of water vapor from the ocean, but without albedo negative feedback.*

[*In an overdue paper still in the queue for the Rocket Scientists Journal, the open loop climate sensitivity is shown to be about 1.4ºC, falling within an 85% confidence band for the IPCC calculation. That paper also shows that changes in albedo, so small as to be swamped by the noise in modern day albedo measurements, are sufficient to make the climate sensitivity about 0.1ºC with the albedo feedback loop closed.*

[*In short, CO2 has not been, is not being, and will not be the cause of any more than a trivial global warming.*

[*P.S. Just moments ago, Denver's Mayor John Hickenlooper was on TV boasting that Denver was proudly doing its bit as the green city host to the green Democratic convention - by cutting carbon dioxide emissions. He sports a pedometer on his belt.*

[*Mayor, mayor! CO2 is a greening agent. Benign in all other respects, it is an optimum effluent.*]

Posted by John, Channel Isles | August 6, 2008 10:51 PM

Derek wrote:

Hello again Dr. Glassman,

Thank you for your previous response, greatly appreciated.

Recently it appears that the Mauna Loa measurements have come in for some more detailed examination / questioning. Namely, as I'm aware at Anthony Watts web blog, Watts up with that? So far the commentary and following discussion has covered three threads. I'll link to the latest thread only, the earlier ones being referenced from this thread.

http://wattsupwiththat.wordpress.com/2008/08/07/mauna-loa-to-improve-the-co2-data/

In particular I noted this post from Dee Norris, in one of the earlier threads.

" The raw data is available from 1974 to 2006 as I posted earlier.

ftp://ftp.cmdl.noaa.gov/ccg/co2/in-situ/mlo/

ftp://ftp.cmdl.noaa.gov/ccg/co2/in-situ/README_insitu_co2.html "

I recall that you have suggested that the raw data from Mauna Loa is not available. (Or the files are too large to download on a normal PC.) Is this the raw data. Are the files still too large. If they are the raw data files in a better format (i.e., downloadable) I thought you should see the link.

I'd appreciate your opinion on this subject.

Thanks in advance,

Derek.

[*RSJ:Thanks for the links. The files from NOAA are of a much finer resolution than I had previously discovered. They contain hourly averages of CO2 measurements in separate files for each year, covering 32 years 7 months. That's a total of just over 284 thousand records, which would consume over 4 full Excel columns. That ought to bring Excel to its knees.*

[*Clearly these are not raw data, though the term "raw data" may be vague and situational. They are not raw because even the hourly figures are averages. A viable criterion for raw data might be the point in the acquisition and reduction at which the data first appear in physical dimensions appropriate to the parameter, such as units of mass fraction. In another investigation, raw might mean transducer outputs in volts or count.*

[*These records should prove useful to an analysis to extract the diurnal variations in CO2 concentration. For someone with obsessive compulsive data reduction disorder or a lot of spare time, a little scientific treasure might be waiting. However, they are not sufficient to understanding whether calibrations made records from various stations or instruments appear contiguous, nor to understanding whether the seasonal variations observed are due to biosphere respiration and precipitation as opposed to seasonal wind currents coupled with patterns in spatial concentration. Do the data include corrections for Southern Oscillation Index (SOI) (El Niño) conditions, or for volcanic activity?*

[*These records do not include any wind vector measurements or temperatures. They do show the results of quality control decisions, in particular tags indicating "rejected, diurnal variation (upslope)", but neither a basis nor data for making the decision. The label upslope seems to indicate a wind pattern observation.*

[*A magnificent amount of work has gone into these records, but sometimes the results and conclusions seem too pat. Suspicions will be resolved only upon full, free, public disclosure, including the reference papers downloadable in text format. That should be done long before another dime is spent on CO2 abatement.*]

Posted by Derek | August 8, 2008 1:20 AM

Derek wrote:

Thank you for your very prompt response, I have "paraphased" it (apologies if I have lost any of the intended meaning / understanding / points, but I sincerely hope I have the basics correct.), and will let you know if the responses are worthwhile reporting back.

Posted by Derek | August 8, 2008 12:20 PM

Derek wrote:

A response that may be worth noting. (I think you may well already aware of this pdf) A pdf by Dr. Tans explaining how the Mauna Loa data is collected, at present it is supposed to be the most up-to-date available … from 1989 (but admitted as out of date by Dr. Tans):

http://www.catskill.net/denisenorris/ThoningK_JGR89.pdf Atmospheric Carbon Dioxide at Mauna Loa Observatory 2. Analysis of the NOAA GMCC Data, 1974-1985 KIRK W. THONING AND PIETER P. TANS

To understand a statistic, or statistics first you must understand the assumptions behind the statistics.

I noted part of the wording in the paper to the effect that a lot of data is omitted in calculating the averages (which is what is being referred to as "raw data" ?) because of the evenly mixed CO2 assumption....

[*RSJ:Thanks for the reference. I had not seen it, and it is informative. It shows that the consideration given to wind in the data reduction was a coarse upslope/downslope qualification. The paper has an interesting reference on wind conditions: Mendonca, B. G., Local wind circulation on the slopes of Mauna Loa, J. Appl. Meteorol., 8, 533-541, 1969. This is available online as a pdf image.*

[*For several reasons, the AGW model needs atmospheric CO2 to be well-mixed. (This would be the necessary consequence of CO2 being long-lived and so builds in the atmosphere, and it helps with the proposition that MLO measurements are not merely a local phenomenon.) So climatologists make the well-mixed assumption, notwithstanding plain, contradictory evidence in their own reports. The assumption seems to have seduced MLO investigators into ignoring the shifting wind at MLO and its effects on measurements because of the plume of outgassing from the nearby Eastern Equatorial Pacific, whenever that was discovered.*

[*Thoning shows he gave scant consideration to temperature, in particular to global average temperature and its effect on outgassing. So these documents support the hypothesis that the reduction of the MLO CO2 concentration data has not taken into account the influences of the oceanic outgassing plume.*

[*Seasonal changes in the MLO CO2 record may be better correlated with wind patterns than with biosphere respiration and precipitation. Charles Keeling attributed the seasonal effects to the latter, and that conclusion persists today in the publications.*

[*More important are the secular changes which might be occurring because the MLO CO2 record is affected by the temperature dependent intensity of the outgassing plume, and because the location of the plume may be slowly shifting with respect to Mauna Loa. These effects are the most probable cause of the observed increase in CO2 wrongly attributed to fossil fuel burning.*

[*By the way, Thoning featured the conclusion that 59% of fossil fuels emissions had remained in the atmosphere, and that that accounted for the observed growth rate in MLO CO2 of 1.42 ppm/year over the first 12 years of record keeping. He shows how he based his analysis on the Fossil Fuel Airborne Fraction, which is the ratio of annual CO2 emissions to measured annual CO2 growth rate at MLO. The correlation coefficient between the two measurements is only 45%, yet with nothing more, he treats the Airborne Fraction as if it were an established theory. By using the name Airborne Fraction, the climatologists give the empirical parameter an unwarranted predictive power. That the increase in CO2 is due to man is a conjecture on this evidence (actually, it is false), whether couched in the name Airborne Fraction or not.*]

Posted by Derek | August 8, 2008 11:58 PM

Cyrus wrote:

I know almost nothing about this, but going over your article and responses, have picked up that there is more than "no consensus" on the cause of climate change, but there are people blocking information. I find with great interest your point about "peer reviewed" journals blocking publication of articles and have found the same in such unrelated fields as medicine and studies in religion! How come our scientific and scholarly journals are getting a bit like the corporate media? They only publish things that don't challenge the status quo? Aside from my comments here, could you recommend a website for a non-rocket scientist, to get started and up to speed on the issues of climate change that isn't biased and one-sided?

[*RSJ: A very active campaign is underway to discredit and ridicule anyone who expresses even normal, healthy scientific skepticism about the AGW model. It takes two primary forms: (1) he lacks credentials, or more pointed, he is not a climatologist, or (2) he has not published his claims (or perhaps anything else) in a recognized, peer reviewed journal. Either is sufficient for the defenders to ignore legitimate questions or concerns, and to diss skepticism. For proof, browse through either of these two sites:*

http://www.greenpeace.org/usa/campaigns/global-warming-and-energy/exxon-secrets

http://realclimate.org/

[*Both are useful resources, but not for the unvaccinated. Greenpeace's Exxon secrets site is not limited to the alleged Exxon conspiracy. You can find some helpful biographies there. You can ignore the fact that so and so might have had funding from an evil corporation, if that's not redundant. After all, Greenpeace makes to effort to black list true believers who have accepted government largesse.*

[*Realclimate.org is an unabashed, unapologetic apologist for AGW. Some of the authors are actually scientists respected outside the AGW community. The site can be a resource for excellent, though tainted, technical information on a wide range of relevant topics. Many of the articles should be readable by nonscientific professionals. However, bear in mind that authors write to support the tenets of anthropogenic global warming, and tend to respond to meddlers with ad hominem attacks and distortions of their arguments.*

[*You've set yourself a difficult task. An important starting point would be the Summaries for Policymaker of the IPCC's Third Assessment Report and the Historical Overview of Climate Change Science of its Fourth Assessment Report.*

http://www.grida.no/CLIMATE/IPCC_TAR/wg1/005.htm

http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_Ch01.pdf

[*These summaries are important because **there would be no climate crisis but for the IPCC**. They are somewhat readable, being*

written for ordinary legislators and government administrators. The ability to read graphs would be helpful, but a little knowledge of the precepts of science, to which climatology must be subservient, might prove a hindrance.

[*If you have any questions, post them here as comments for a considered reply. I do reserve the right to answer in the context of the overarching AGW conjecture, and as reported by IPCC. Climate on this blog is dedicated to debunking the IPCC.*

[*Here are a couple of websites that responsibly challenge the AGW conjecture and report on progress against the movement:*

http://www.climateaudit.org/

http://www.jennifermarohasy.com/blog/

[*None of these sources, RealClimate.org, Exxon secrets, climateaudit.org, jennifermarohasy.com, or even the IPCC reports themselves, is peer-reviewed, except via the Internet. To be fair, the IPCC has done a respectable job of subjecting its reports to a panel of experts, and going beyond what journals do in peer-review by publishing the critics' names, the criticisms, and the disposition of each. However, the moderator of these reviews is the author, not an independent publisher allegedly or ostensibly trying to uphold scientific standards. Regardless, the IPCC's draft documents and its published review process constitute a valuable resource in debunking its reports.*

[*Peer review is a modern and failed phenomenon. It still looms large in academia and in the halls of bureaucracies. But in the fields of science with commercial value, industry employs the majority of PhDs, who make major scientific advances at triple the scholarly pace, but do so under the silence of trade secrets.*

[*Teach your kids how to read corporate media. When an ad says, "this cleaner never streaks", what does that tell you? Answer: cleaners streak. Two things protect the public from raw advocacy: competition and caution. Information and science literacy are the enemy of charlatans. The Internet, the blogosphere if you will, is proving to be our salvation.*

[*For more, Google for "Famous papers which were not peer-reviewed", a 2004 article cut from Wikipedia (by peer-review advocates?). It included five key papers by Einstein, and Watson & Crick's paper on the structure of DNA. See also*

http://www.wikinfo.org/index.php/Peer_review#Famous_papers_which_were_not_peer-reviewed

[*And you might want to review the famous hoax perpetrated by Alan Sokal on the peer review process.*

[*The hallmark of science is models with predictive power, regardless of whether the algorithm has been published. Predictive power without publication is scientific success. The converse, publication without predictive power, is at best a hypothesis, and more likely a conjecture.*

[*For evidence of how peer review has become dysfunctional, consider the following:*

> Richard Horton, editor of the British medical journal The Lancet, has said that "The mistake, of course, is to have thought that peer review was any more than a crude means of discovering the acceptability - not the validity - of a new finding. Editors and scientists alike insist on the pivotal importance of peer review. We portray peer review to the public as a quasi-sacred process that helps to make science our most objective truth teller. But we know that the system of peer review is biased, unjust, unaccountable, incomplete, easily fixed [*RSJ: jiggered, not repaired*], often insulting, usually ignorant, occasionally foolish, and frequently wrong."
>
> http://en.wikipedia.org/wiki/Peer_review, citing from
>
> http://www.mja.com.au/public/issues/172_04_210200/horton/horton.html.

[*How come, you ask? Many professional journals have been hijacked, diverted from science for power, recognition, control, and especially money. Peer review is practiced as rice bowl protection.*

[*Peer review is not the current method for blocking information about AGW. The infection has spread too far. Peer review is inherently slow enough to impede criticism, even if publication of non-conforming papers were to be allowed. The defense of AGW takes the form of non-engagement through ridicule and ad hominem attacks, plus slick, scary media productions. AGW is no longer part of science. It is a religion and a political movement. It is a belief system. It's Hollywood.*]

Posted by Cyrus I August 9, 2008 6:39 PM

John, Channel Isles wrote:

080814202103

Thank you very much once again for your recent reply Dr G.

I understand the solubility pump, CO2 forcing potential and the Vostok record shows CO2 does not have any significant impact on temp.

[*RSJ: True enough, but let us not forget that CO2 and global temperature are correlated, but that CO2 is a lagging indicator of the warming. It can't be a significant cause. The IPCC admits as much with the glib excuse that CO2 nonetheless amplifies the initial orbital forcing. TAR, ¶2.4.1, p. 137.*]

But I've come across some comments with my limited science background I can't counter. Can you kindly throw some light on these replies (please put in layman's terms if possible) which I believe is AGW advocates just trying to blind (bamboozle) the public with scientific language.

In a Guardian article, green journalist George Monbiot trashes Lord Chris Monkton's claim the IPCC have exaggerated the warming effects of CO2 when Monkton claimed: "'the UN repealed a fundamental physical law', doubling the size of the constant (lambda) in the Stefan-Boltzmann equation. By assigning the wrong value to lambda, the UN's panel has exaggerated the sensitivity of the climate to extra carbon dioxide. … [Lord Monkton's] claims the Stefan-Boltzmann equation have been addressed by someone who does know what he's talking about, Dr. Gavin Schmidt of NASA's Goddard Institute for Space Studies. He begins by pointing out that Stefan-Boltzmann is a description of radiation from a 'black body' - an idealised planet that absorbs all the electromagnetic radiation that reaches it. The Earth is not a black body. It reflects some of the radiation it receives back into space."

[*RSJ: I found George Monbiot's article, dated 11/14/06, at your link, and it contains your quotation. I also found a paper by Monckton published in the Sunday Telegraph on 11/5/06.*

http://www.telegraph.co.uk/news/uknews/1533290/Climate-chaos-Don%27t-believe-it.html

[*It contains Monbiot's quotation attributed to Monckton. But here Monbiot collapsed, falsely attributing to Monckton the claim that the UN doubled "the size of the constant (lambda) in the Stefan-Boltzmann equation" (quoting Monbiot).*

[*The constant in the Stefan-Boltzmann Law, cleverly called the Stefan-Boltzmann Constant, is conventionally designated by the lower case Greek letter sigma, σ. No one suggested this constant had been altered. Monckton said that the S-B Law was used to compute lambda (the link to his calculations no longer works), and that when the UN doubled lambda, it had "effectively repealed the law". What Monckton referred to was indeed lambda, λ, but that is climate sensitivity, a different parameter.*]

Schmidt replies Monckton forgets, in making his calculations, that "climate sensitivity is an equilibrium concept": in other words that there is a time-lag of several decades between the release of carbon dioxide and the eventual temperature rise it causes. If you don't take this into account, the climate's sensitivity to carbon dioxide looks much smaller. This is about as fundamental a mistake as you can make in climate science.

What is 'lambda' and is Schmidt arguing CO2 stores up and saves heat for decades? Sounds ridiculous!

[*RSJ: Monbiot's error made your question about lambda ambiguous. First, σ is a constant that relates the energy radiated from a black body according to its temperature. Its units, Watts/square meter per degree Kelvin to the fourth power, give you clues to its meaning and something of the relation between temperature and power. See the article in Wikipedia titled "Stefan-Boltzmann law", noting that a Joule per second, J s $^{-1}$ is the same as one Watt.*

[*Second, λ is climate sensitivity, a parameter in ºC per Watt m $^{-2}$ which the IPCC defines several different ways. As it's units suggest, it is the rate of change of global average surface temperature to a change in radiation power through the atmosphere. TAR, ¶6.2.1, p. 354. It also defines an "equilibrium climate sensitivity", and an "effective climate sensitivity", determined before equilibrium. TAR, Glossary, p. 789. Further, the IPCC Reports regularly use climate sensitivity simply in ºC, in which case it refers to climate forcing attributed to a doubling of atmospheric CO2 concentration. TAR,* passim.

[*I couldn't verify Gavin's claim that Monckton erred with respect to the equilibrium nature of climate sensitivity. The error was not apparent to me in his article, and his calculations could not be downloaded. Regardless, Gavin has no basis for his claim in light of the ambiguity in the IPCC definition of climate sensitivity.*

[*Gavin surely didn't mean that CO2 stores up and saves heat. What he refers to is that climate models compute a new equilibrium point for each set of forcings, but that they gradually approach that new point by computational iterations. This is not to be confused with the reaction time of the climate, which would require emulating the heat capacity of the various elements. Instead, this is the reaction time of the computers, and the intermediate solutions do not have any particular physical meaning. At first, the climatologists were not able to predict the equilibrium point without letting the models run to equilibrium. Now they can, so they employ the "effective climate sensitivity". Gavin may be suggesting that Monckton erroneously used an intermediate point in the computer response instead of the final equilibrium point. How Monckton might have had access to such a datum is not at all obvious.*

[*8/16/08:*

[*Monbiot's references to Gavin Schmidt relate well enough to Gavin's article of 11/9/06, "Cuckoo Science". It is available at*

http://www.realclimate.org/index.php/archives/2006/11/cuckoo-science/

[*Gavin introduces Monckton as a man "with obviously too much time on his hands". Then Gavin conflates two articles, adding a piece from Steve Malloy's Junk Science blog. From there, Gavin gratuitously explains something that Monckton did not claim: that Earth is not a black body. Gavin says,*

> So here's the first trick. Ignore all the feedbacks - then you will obviously get to a number that is close to the 'black body' calculation. Duh! Any calculation that lumps together water vapour and CO2 is effectively doing this … .

[*His straw man error he attributes to Monckton leads Gavin down the slippery slope of the gravest of IPCC errors, about as fundamental a mistake as one can make in climate science. It's hard to know where to start.*

[*The IPCC makes clear that the "climate system is highly nonlinear". This is riddled with misconceptions. Linearity is a property of*

models, not the real world. It is a mathematical property, and a system, set of equations, or whatever, is either linear or not. Nonlinearity does not come in degrees, as in more or less nonlinear, or highly so. Several definitions of system linearity are available and equivalent. One particularly applicable definition is that a model is linear if and only if the output in response to two sources is the sum of the outputs in response to each source taken separately.

[*In one sense, the IPCC can be excused because in the vernacular of science, a conversational claim that a system is nonlinear would be taken to mean that the model for the system is not linear. However, the model that the IPCC constructs for the climate features right at the outset a linear property. The radiative forcing paradigm assumes that without the influence of man, Earth's climate is in equilibrium. Then in response to the natural state of climate drivers (forcings), it computes a response due to man, and adds the two responses. Because its model is admittedly nonlinear, no reason exists to expect the anthropogenic forcing to be additive.*

[*And that is only the tip of that iceberg. Apparently, the IPCC presumes that the natural state, that is, the preindustrial global state, had no temperature rise. Its models do not seem to calculate the warming due to recovery from the last major and minor ice ages (millions, tens of thousands, and centuries ago), and then they compute warming due to man. As a result, the natural warming of those epochs would seem to be credited to man, if the IPCC models make any sense at all.*

[*Gavin ridicules the IPCC critics for some alleged offense with regard to feedbacks ignored. In particular, he accuses these critics of AGW of ignoring something about water vapor and CO2 loops. These involve the hydrological and carbon cycles, respectively, neither of which the IPCC models correctly. As the surface warms, the ocean emits more CO2. Since CO2 is a greenhouse gas, the additional CO2 tends to warm the atmosphere. The IPCC does not model this effect. It does not reproduce the warming effect it admits exists in the Vostok record, but which it chalks up to an unproved amplifying effect.*

[*The IPCC recognizes that warming causes the ocean to increase atmospheric water vapor, the most significant greenhouse gas of all. Indeed, it is this positive feedback by which the IPCC models manage to create the large warming effect it attributes to CO2. What the IPCC does not do, however, is increase cloud cover and thereby increase cloud albedo as the water vapor increases. This is a powerful negative feedback. It is the feedback that regulates Earth's temperature against warming from any source. It mitigates the effect of solar fluctuations, of the Milankovitch cycles, and especially for the AGW model, the greenhouse effect.*

[*Cloud albedo is a shutter on the extreme power of the Sun: 1370 W m^{-2} at Earth. Greenhouse gases by comparison regulate 390 W m^{-2} at 14ºC, which would be 33ºC cooler without the greenhouse effect. My simulation shows that an albedo change much smaller than the accuracy with which albedo is known will mitigate the greenhouse effect by a factor of 10.*

[*Whether the critics of AGW have erred or not is irrelevant. It is the IPCC and Gavin Schmidt who have erred on feedbacks. Their climate sensitivity is due to greenhouse gas with some positive feedback loops closed (good), but in open loop with respect to cloud albedo (very bad). Because of the strength of the albedo negative feedback, the IPCC models the greenhouse effect essentially open loop.*]

Link to Guardian article.

http://www.guardian.co.uk/commentisfree/2006/nov/14/science.comment

I also ran across some posts on RealClimate written by Eric Steig commenting on Al Gore being cross-examined by Congressman Joe Barton on getting his CO2 lag ahead of Temp (just a 'minor' inaccuracy!) he writes "… those who've been paying attention will recognize that Gore is not wrong at all ... . On historical timescales, CO2 has definitely led, not lagged, temperature."

How can Mr. Steig claim such 'anti-science' like this?

After the Steig article a poster called John (no relation to me) posted, "It would appear that the actual CO2 levels are rather impotent as an amplifier either way ... warming or cooling."

Jeff (no relation to you I presume!) Severinghaus from RealClimate replies, "… it is not logical to argue that, because CO2 does not cause the first thousand years or so of warming, nor the first thousand years of cooling, it cannot have caused part of the many thousands of years of warming in between. … The contribution of CO2 to the glacial-interglacial coolings and warmings amounts to about one-third of the full amplitude, about one-half if you include methane and nitrous oxide."

RealClimate Post 77 says, "*As you might be rightfully aware, according to Takahashi measurements of global CO2 fluxes from oceans, they outgas about 100GT of carbon per year in tropical areas. Thank you for boiling this post down to its bones.* [¶] The oceans give off about 90 gigatons of carbon altogether per year, and absorb 92 gigatons. They are presently a sink for carbon dioxide, not a source. The recent increase in carbon dioxide has come about from fossil fuel burning and land-use changes."

[*RSJ: This sink vs. source gaff is too big to ignore. The ocean is a sink for atmospheric CO2 all across its surface and wherever the waters cool. That cooling causes an uptake in CO2. In a couple of places, the ocean is a major source of CO2, the dominant one being in the Eastern Equatorial Pacific. A huge river of CO2 circles the globe in perpetuity, or a least until the next ice age.*]

RealClimate Link.

http://www.realclimate.org/index.php/archives/2007/04/the-lag-between-temp-and-co2/

You answered recently my question CO2 is accredited with about 20% of greenhouse warming. I've also seen water vapour accredited with 90-95% of warming. And I've just seen a Facebook recording of Australian scientists (anti-AGW) who stated the University of Chicago estimate the first 22 ppm of atmospheric CO2 has the greatest warming impact, more so than the next 400 ppm in total put together. You've also mentioned the decline of influence in CO2 as its atmospheric volume increases. Can you explain how this

works – why the CO2 forcing is not linear with increased volume - please?

[*RSJ: Imagine that we had an instrument that would let us visualize the radiation emitted from Earth, giving it the faux color spectrum of the rainbow laid across the band of black body emissions. And further imagine that we could create such images by varying the atmosphere. With no atmosphere, the radiation would appear faint in the reds and oranges, strong in the yellows and greens, and weak again in the blues in violets. Now we put the atmosphere back, and the radiation has next to nothing in the reds and oranges, nor in the blues and violets. It would be dominantly greens and yellows, with a little weakness, a hole, on the yellow side of the greens. Now we experiment by adding and subtracting the gases in the atmosphere. Almost all the attenuation in the reds, blues, and violets and about half the attenuation in the orange was due to water vapor. The little weakness on the yellow side of the greens was due to oxygen.*

[*In this not too imaginary imaging, we can measure a strong CO2 effect in the violets, but Earth didn't have much radiation there anyway. Carbon dioxide had a strong effect in the orange region, which water vapor had already reduced by about half. So if we increased the concentration of CO2, we could cut off only what little was left of the oranges.*

[*Remember, these were faux colors, but it should give you the correct idea. Very dense but still practical CO2 can have no more effect than to absorb what's left of the faux orange. We're dealing with the spectrum of radiation, and the absorption spectra of the various gases, and sometimes described in terms of windows.*

[*For a nice set of diagrams on the process, visit Wikipedia,* Radiation Transmitted by the Atmosphere, at

http://commons.wikimedia.org/wiki/Image:Atmospheric_Transmission.png

[*Otherwise, I can't vouch for the various numbers you quoted. I wouldn't want to waste much time on them because the greenhouse effect is mitigated by Earth's albedo, and CO2 plays a minor role in the GH effect.*

Finally I'm still trying to button down the actual mechanical figures of CO2 (Tons in the atmospheric reservoir and the Tonnage in and out of the sources and sinks). There seems no definitive source (incl. the IPCC) for say the Annual average figures for say 1900 to 2008 though we do have the Annual percentage changes. The below is the best I've found to date but far from complete. Do you know of any sources accessible online?

Thank you once again for your help :)

CO2 Chart - Years 1700 to 2000

http://cdiac.ornl.gov/trends/co2/siple-gr.htm

Source.

http://cdiac.ornl.gov/trends/co2/siple.htm

http://cdiac.ornl.gov/trends/co2/contents.htm

[*RSJ: No, I don't know of a better source. The reservoir and flux figures are by analysis, not measurement, so you shouldn't find values by year.*

[*There would be no climate crisis but for the IPCC. Congressmen and the President are not going to read technical journals or data repositories on much of anything. By the same token, alternative models to the IPCC's or alternative data don't matter either. Even if the IPCC adopted a model incorrectly, or got the data wrong, the only thing that counts is how the IPCC finally interpreted the things it relied upon, or selectively omitted. The IPCC, along with its AGW conjecture, needs to be debunked based on its own writings. The evidence for that debunking is abundant.*]

Posted by John, Channel Isles | August 14, 2008 8:21 PM

John, Channel Isles wrote:

Just reading some above posts 3 more issues arise. There's a 'missing' 3 Gt per Year sink for CO2 according to IPCC.

1). Could it be in surface ice (Antarctic, Arctic, Glaciers) and snow (mountain snow) ?

[*RSJ: At one time, the IPCC denied the existence of the missing sink (TAR, ¶3.5.1, p. 208), then later sort of resurrected it by renaming it the "residual land sink" (4AR, ¶7.3.2.2.3, p. 520).*

[*The IPCC model contains two aspects which are difficult to take seriously. One is the notion of radiative forcing, which creates a linear, additive temperature increase to a "highly nonlinear" system. The other is the linear idea of the net of anything, in particular, net fluxes of CO2.*

[*The IPCC reckons that the flux of CO2 to leaf water is about 270 PgC/yr, terrestrial Gross Primary Product is about 120 PgC/yr (which may come out of leaf water), and ocean flux is 90 or so GtC/yr. So the total is at least 360 GtC/yr, over 50 times what the IPCC calculates for man's emissions. Assume that the standard deviation error in these figures is about 20%. Then the standard deviation of net difference between two such values is the square root of the sum of the squares of the two component standard deviations. So a 20% one sigma error in 100 GtC/yr is 20 GtC/yr, and the net of two such numbers has its own one sigma error of 28 GtC/yr. That's a huge error when considering a missing sink of 3 or so GtC/yr, or a net ACO2 increase of 2 or 3 GtC/yr. What's missing, or even of*

interest, is lost in the noise.

[*To defend its chosen radiative forcing paradigm, the IPCC must suffer the classic problem of tyros of calculating the small differences between large numbers. It should have known better from elementary principles of science.*]

Which is a result of my 2 other questions:

2). Vostok and other ice cores measure atmospheric CO2 trapped/laid down in the Arctic/Antarctic regions. If cold ocean absorbs CO2 under partial pressure (wind) cannot surface ice (namely does frozen water restrict/prevent CO2 absorption)?

[*RSJ: The ocean absorbs CO2 progressively as surface currents move poleward under the influence of the surface currents, called gyres. The surface cooling continues to the poles where seawater approximately in equilibrium with sea ice, cold and dense, descends as the headwaters of the thermohaline circulation. Wind has been shown to enhance the absorption, but the absorption is inexorable. Absorption is caused by the kinetic energy of the particles under partial pressure.*

[*Partial pressure is defined only for a mixture of gases. Conventionally, dissolved gas is "said" to have a partial pressure. The partial pressure is equivalent to the gas concentration on the atmospheric side if at equilibrium. The gas in solution tends to escape from the ocean to the atmosphere in proportion to the temperature of the ocean, and to reenter the surface waters in proportion to the concentration or partial pressure in the atmosphere above the ocean. This is Henry's Law of solubility.*

[*When the solution is frozen, the whole of the kinetics changes. Now the physics of diffusion and Fick's Laws apply. The word diffusion may be used for both processes. I am unaware of Fick's diffusion coefficient ever being determined for CO2 and ice, but surely it's an extraordinarily slow process. Some CO2 can escape from the trapped bubbles in the ice pack, but the answer to your question is yes, ice terminates the solubility process.*

3). If ice can absorb CO2 does it do so in heavier concentrations than ocean (as according to the CO2 solubility increasing with lower temp) and therefore effect the accuracy of Vostok type measurements?

[*RSJ: Liquid water is remarkably receptive to CO2, and ice is surely quite impervious to it. And I would be amazed if the reduction of ice core data did not take into account losses of CO2 due to diffusion.*]

Posted by John, Channel Isles | August 14, 2008 9:29 PM

John, Channel Isles wrote:

Thank you so much for the crystal clear explanation of the CO2 forcing diminishing past 22 ppm.

If this is proven, and the next 400 ppm or even next 600-900 ppm has little additional warming effect it is surely the end of the AGW and CO2 argument?

How can the IPCC possibly ignore this science in their next Report, in their global computer models (have any factored this in yet?) and not reach the conclusion CO2 cannot possibly be responsible for the warming seen since 1940 and cannot possibly be a threat to future warming?

Debate over for any honourable scientist and unsustainable for the dishonourable ones and with it the politicians living in a scientific vacuum!

[*RSJ: The absorption spectra of greenhouse gases have been well-known for most of a century. The IPCC just skipped over the phenomenon in its Reports to conclude that, by itself, CO2 can't have a frightening enough effect on climate. The IPCC model instead rationalizes that the additional warming caused by the CO2, feeble as it is, is enhanced (increased to favor its AGW conjecture) by the release of additional water vapor, the greatest greenhouse gas. This is the positive feedback side of water vapor. See TAR, ¶1.3.1, subheading* "The enhanced greenhouse effect", *p. 93. In fact, the IPCC refers to the "positive water vapour feedback", by which it means the net effect of water vapor in response to forcings.* Id., ¶7.2.1 Physics of the Water Vapour and Cloud Feedbacks, p. 423.

[*Until last year, the IPCC concept was that the climate is unstable. In its Third Assessment Report, the climate could be upset by a little nudge, and then run away to a catastrophic state. That nudge might have been orbital variations, and the accelerant was CO2. Such unstable systems are just not found in nature. The Delicate Blue Planet is poetry, not science.*

[*In its Fourth Assessment Report, the IPCC introduced the concept of tipping points, which encompasses the more plausible view that the climate is conditionally stable. Now the nudge is some unpredictable amount of CO2. The climate indeed is likely to have multiple, conditionally stable points, as in the ice ages versus the modern era, and in varying stable states postulated for the thermohaline circulation. These processes are what need to be modeled. For each possible upsetting forcing, what is the margin for stability? This requires an analysis of the existing state of the climate, not of the forward looking change in climate from the present state.*

[*The radiative forcing paradigm of the IPCC global climate models assumes equilibrium before industrial man, then seeks to assess additive changes. That alleged initial state is what needs to be quantified and understood.*

[*What the IPCC has failed to grasp is the importance of cloud cover in response to added water vapor, and its high-gain, dominating effect on climate through cloud albedo. The IPCC does not use the concept of closed loop gain, and indeed its radiative forcing model may be unsuitable for assessing gain. The IPCC does recognize that its representation of cloud cover is perhaps the greatest failing of its GCMs. That admission of an inadequate representation of the hydrological cycle is honorable. What the IPCC ignored is its ethical*

obligation to repair this hole, among others, in its modeling before foisting its conjecture on the public.

[*A scientific model must advance past conjectures and hypotheses to the level of a theory before scientists can use it ethically for public policy. This is not to say that conjectures or hypotheses are not sometimes worthy of public funding. In those instances, the objective is to advance some promising but limited knowledge to the level of a theory through non-trivial prediction and validation. Once it is a theory, its practicality can be assessed for measured public action or reaction.*

[*The AGW conjecture is not even a hypothesis because it fails to fit all the data in its domain. Backward looking, it is falsified on several points. For example, it fails to account for the ice ages, even qualitatively. For another, it fails to account for the natural carbon cycle. It fails to simulate dynamic cloud albedo. And it fails to include the background of the on-going global warming in recovery from the last major and minor cold epochs.*

[*It is also not a hypothesis because it is not verifiable. The IPCC fails to make a non-trivial, novel prediction, other than its ultimate prediction of catastrophic global warming, by which its model might be validated. Using the AGW conjecture to institute a global reduction in carbon is unethical.*

[*The meaning of your last sentence isn't clear, but the honorable thing for scientists to do is to speak out against the IPCC and the AGW movement beginning with first principles.*]

[*For a recent example of just such an honorable response, addressed directly to the UN, I commend the 12/12/07 open letter to the Secretary-General by 100 Prominent Scientists. http://scienceandpublicpolicy.org/images/stories/papers/reprint/UN_open_letter.pdf.*]

Posted by John, Channel Isles | August 21, 2008 10:22 PM

David wrote:

Dear Dr Glassman,

Ferdinand Engelbeen has a lot of useful information (and links) regarding CO2 measurements on his website: http://www.ferdinand-engelbeen.be/klimaat/co2_measurements.html For example, he presents graphs showing that exclusion of 'outlier' measurements of atmospheric CO2 at Mauna Loa makes virtually no difference to the overall trend.

[*RSJ: Note that **The Acquittal of CO2** here acknowledged Engelbeen, and credited him as the source for Figure 5. Engelbeen's result, which he found remarkable linear, in fact was curved enough to point to the fact that the Vostok CO2 and temperature data carry the signature of solubility.*]

Of interest is a graph he includes of CO2 measurements at Diekirch (Luxembourg) indicating that the measured values vary by over 150 ppm depending on wind speed (http://meteo.lcd.lu/papers/co2_patterns/co2_patterns.html, fig. 8). This particular station is regarded as unsuitable for measuring the 'background' level as it is located in a valley with forests and urbanization.

[*RSJ: Engelbeen shows the scatter of CO2 concentration with wind speed. He reports on the selection of Mauna Loa data based on wind direction. How can the investigators pretend to record precision atmospheric measurements without recording the wind vector for each data point? Of course, the wind wouldn't matter much if the atmosphere were well mixed. It isn't, and the IPCC Reports show that it isn't notwithstanding its necessary claim that it is.*

[*Engelbeen's source by Massen et al (at your link) shows data being collected simultaneously with the wind vector using two co-located anemometers. The conclusion in that paper shows the wide ranging results that can be discerned from the data when the wind vector is also known. I would quibble with Massen et al only on the validity of the assumption that Mauna Loa is an isolated reference station.*

[*In answer to Engelbeen's inquiry, Pieter Tans referred to a 1959 work by Thoning. It is likely this: Thoning, K.W.,* Selection of NOAA/GMCC CO2 data from Mauna Loa Observatory, In The Statistical Treatment of CO2 Data Records*, NOAA Tech. Mem. (ERL ARL 173), Environ. Res. Lab., 131 pp., 1989. It can be found at*

http://gaw.kishou.go.jp/wdcgg/products/cd-rom/cd_11/A/archive/document/noaaco2.txt

[*But this reference is all about method and not about wind data recording.*

[*The CO2 concentration various around the globe in patterns that are seasonal, secular, and stationary. What appeared to Keeling to be biosphere seasonal effects were quite likely background CO2 variations modulated by seasonal wind patterns. Without wind data, this is a hypothesis that is difficult to test.*]

Engelbeen states: "Background CO2 levels can be found over all oceans and over land at 1000 m and higher altitudes (in high mountain ranges, this may be higher)." But Anthony Watts presents a map showing CO2 concentrations at an altitude of 8 km in July 2003 as measured by the AIRS instrument on the Aqua satellite. The concentration ranges from about 365 to 382 ppm, and it seems quite possible that variations at the surface would be even higher. The AIRS team recognizes that its findings are at variance with mainstream thinking about CO2 being well mixed, and is still validating its results. See:

http://wattsupwiththat.wordpress.com/?s=mixed+signals

http://wattsupwiththat.wordpress.com/?s=encouraging+response

[*RSJ: The NASA AIRS chart is colorful, but why isn't the Eastern Equatorial Pacific outgassing more intense? The writer mentions that volcanic activity seems to be missing, but ignores the oceanic outgassing. Its flux is about 15 times as great as man's emissions, and far more localized. Unless there's a problem comparing concentration with flux, the region southeast of Hawaii should be beyond bright red. It appears so on the Takahashi flux diagram of AR4 Figure 7.8, p. 523.*

[*The mid-troposphere (500mb) map for CO2 does indicate the outgassing hotspot, but the picture resolution is not the best. See Watt's link to http://www-airs.jpl.nasa.gov/Science/ResearcherResources/MeetingArchives/TeamMeeting20060307/2006_03_07/Chahine-INTRO-Final.pdf*

[*The NASA AIRS chart is from 2003. Did it not get even an honorable mention in the IPCC Fourth Assessment Report, Climate Change 2007, because it was only recently prepared and released?*

[*The IPCC's necessary well-mixed assumption is disproved by the ultimate authority for debunking AGW: the IPCC's own Reports. One Report notes at least a detectable east-west gradient to CO2, and that its north-south gradient is an order of magnitude greater. The Reports show evidence of the intense outgassing near Mauna Loa, but give no consideration to the plume effects on Mauna Loa records. I dispute the existence of any valid "mainstream thinking" on this subject.*

[*So we should rely on the Takahashi diagram, and not the extraneous data from NASA that the IPCC ignored.*

[*The author also didn't do his homework as to the alleged agreement by both sides on the AGW question. Each of the four papers so far on this blog disparage the well-mixed assumption. See for example RSJ response to sunsettommy of 11/26/07 in* ***Gavin Schmidt's Response to the Acquittal of CO2 Should Sound the Death Knell for AGW****.*

[*As to the other questions you raise, the Anthropogenic Global Warming problem deals with macroparameters. These include the surface temperature, Earth's albedo, and the greenhouse gas concentrations, all global averages. These are abstract concepts, not directly measurable, but nonetheless amenable to modeling, and even the simplest of models, and subject to governance by thermodynamic principles and laws.*

[*At the next, finer level of resolution are the sensible parameters of local and regional weather in three dimensions. These are hugely complex, and have defied assemblage into a global climate model at the level of a theory (as opposed to a conjecture or hypothesis, if you've not been following the RSJ approach).*

[*So while the distribution of gases and heat above the surface, or in the reaches of distant canyons, are interesting topics for study, they have little bearing on the AGW question. That is especially the case if the IPCC has not relied on such data, or explicitly ignored them when they were relevant.*

[*However, special remarks are in order for the question of wind speed because it affects solubility, a topic all but ignored by the IPCC. For example, the last two IPCC Assessment Reports apparently never mention Henry's Law or Henry's Constant for CO2. The IPCC refers to the well-known solubility pump as the "solution pump".*

[*Wind has a substantial and well-known effect on the rate of uptake of CO2. However, this is another local example, perhaps vital at the cell level of a GCM, but not significant at all on the macroparameter scale. Surface currents off-load CO2 eventually by outgassing in the warm waters of the Pacific, with an additional minor source in the Indian Ocean. From there, the waters course their way poleward along the western side of the gyres, cooling and loading again with atmospheric CO2. At the end where the currents descend as the headwaters of the thermohaline circulation, they are ice water, saturated with CO2. How each parcel of water might have acquired its load of CO2, quickly or slowly at the whims of the wind and temperature along the way, is random and immaterial to the outgassing because the end point is the same.*]

Engelbeen sets out the arguments used to support the view that fossil fuel burning is the main cause of the increase in CO2 since the industrial revolution. A brief summary of his main points:

1. Humans currently emit about 7 GtC/yr, but atmospheric CO2 is increasing by about 4 GtC/yr, implying that natural sources play little or no role in the increase; natural CO2 sinks have been larger than natural CO2 sources for the past 50 years. [this seems to be a statement of belief rather than of fact]

[*RSJ: The implication is unfounded, and wrong based either on physics or on logic. Taking everything at face value, the ACO2 certainly more than* ***accounts for*** *the atmospheric increase, but that is far from the same as being the* ***cause*** *of the increase. The argument is mere single point bookkeeping.*

[*Suppose the natural sources increased at the same time by say, 7 GtC/yr, and the natural sinks increased by 10 GtC/yr. The bookkeeping is the same, and the increase would be 50:50 natural and ACO2.*

[*Or, suppose the ocean channeled natural CO2 sources directly to the natural sinks, and thus the natural sink had surplus capacity to take in three sevenths of the ACO2. An illogical, but sufficient priority system would be in operation. The sinks have no way to discriminate between nCO2 and ACO2, even hypothesizing a fractionating Henry's Law, and the two gases are irreversibly mixed in the air. Two molecules of CO2 with the same isotopic weight are indistinguishable, regardless of the source. And to the first and second order, most processes are insensitive to isotopic weight.*

[*The IPCC determined that CO2 in the ocean is subject to at least three different lifetimes, short for awhile, then medium, then dreadfully long. Thus it necessarily implies that CO2 molecules age, that each molecule has a tag by which it switches from one lifetime to another. Perhaps it envisions that CO2 molecules come with a double coating like an enteric tablet. It has the ocean discriminating between old*

molecules, slowly being sequestered, and new molecules getting the swift treatment. Except where weight matters, all CO2 molecules are alike chemically and physically, and they have no memory.

[*Back to Engelbeen, his first argument silently rests on the well-mixed hypothesis. His data appear to be Mauna Loa measurements, and not necessarily global data. The IPCC reports that investigators calibrated the other sites to match the Mauna Loa measurements. Mauna Loa as you suggest has influences of the volcano, but also of El Niño, and apparently the investigators calibrated or adjusted these effects out of their data. Meanwhile MLO sits in the wandering, variable plume of the Eastern Equatorial Pacific outgassing. And al the time, Earth is warming (an essential tenet to the AGW conjecture), causing the natural outgassing to increase (which the IPCC nowhere computes).*]

2. The correlation between human emissions and the increase in atmospheric CO2 since 1992 gives an R^2 of 0.997. The atmospheric increase is about 0.55% of human emissions, and there is no known natural process that is able to force CO2 into the atmosphere exactly at the same constant rate. [isn't there?]

[*RSJ: Amazing! But, alas, not believable. Do you have a reference?*

[*The odds are the number was calculated without well-founded detrending. I'd wager it got no detrending at all, making the result quite meaningless. As a minimum the records should have been detrended by the mean and a linear trend line. Better, perhaps, would be detrending by the growth history of ACO2 for the period.*

[*As shall be shown on this blog by and by, none of the reasons the IPCC gives for the rise in CO2 being anthropogenic is valid. Worse, the IPCC has manipulated the data to give the false impression of cause and effect. Still, the reasons for the measured increase are little more than informed conjectures, and the data are too pat and suspicious. The problem of the climate is not solved.*

[*As will be shown, the effect of ACO2 on the increase in atmospheric CO2 concentration is analogous to the greenhouse effect on global surface temperature. In each case, the hypothesized cause is correlated with the companion observation. The observation does increase as the alleged cause increases, but the IPCC exaggerates the response by roughly an order of magnitude.*]

3. The d13C levels in both the atmosphere and the upper oceans have been decreasing since 1850, as would be expected from anthropogenic emissions. The oceans cannot be the cause of the increase in atmospheric CO2 as their d13C content is too high. [probably too simplistic judging by what you've said about isotope ratios so far]

[*RSJ: Can you supply a reference for surface ocean d13C? The IPCC compares atmospheric d13C only with the rate of CO2 emissions. It doesn't even supply a mass balance computation. More on this to come.*

4. Vegetation is not the cause of the increase in atmospheric CO2, as data since the 1990s show there is a deficiency in oxygen use from fossil fuel burning; vegetation must be a net sink. [how certain are these data?]

It looks like Engelbeen neglects the huge uncertainties in our understanding of the carbon budget; the IPCC's AR4 (fig. 7.3) gives error margins of +/-20% for the various fluxes. I understand you're going to publish more about isotope ratios in the future.

Engelbeen does not discuss the issue of CO2 residence time. But whatever the residence time, if CO2 is being added to the atmosphere faster than it is being removed, the CO2 concentration will rise. Since natural and anthropogenic CO2 emissions quickly become inseparably mixed, would you expect the same percentage of both streams to contribute to the overall increase in atmospheric CO2? Perhaps more accurate isotope data will one day be able to discriminate between IPCC and alternative models.

[*RSJ: Yes. In general, each species will receive the same, geometry sensitive fate throughout the carbon cycle. Natural CO2 and ACO2 are made of the same isotopes, even though ACO2 is supposed to have no 14C. Each has its own ratio of the three. They mix in the atmosphere to produce yet another ratio. Some plants are known to fractionate (preferring one isotope over another) and some investigators suggest that some processes are molecular weight dependent. But these processes are high order and well in the noise. The ability to measure the isotopes is already sufficient to reject the hypothesis that the drop in atmospheric d13C is caused by the addition of ACO2, and with it, the hypothesis that the build up in the atmospheric CO2 is caused by slower ACO2 uptake by any sink.*]

When temperature starts to rise at the beginning of an interglacial, doesn't outgassing of CO2 from the oceans start to increase straight away? Why would seawater have to make a complete circuit of the ocean conveyor before it can outgas enough CO2 to produce a marked increase in atmospheric concentration?

[*RSJ: Good observation and excellent question. Both uptake and outgassing depend on solubility, for which the two primary parameters are the current temperature of the water and the current partial pressure of the CO2 in the air. In my model, the THC CO2 concentration would be determined by the saturation curve at 0ºC to 4ºC. The uptake of CO2 in the THC is independent of the global average temperature, so the outgassing has no temperature memory. The story is different with partial pressure. When atmospheric CO2 is changing on the scale of a millennium, the outgassing concentration will be lagging the present change. It has a memory of the pressure at the time of its initial descent. This apparently is enough to be measurable in the Vostok record. For more, see the upcoming paper.*]

I would value any comments you would like to make on these issues.

Regards,

David

[*RSJ: Thanks for the table corrections.*]

Posted by David | August 24, 2008 6:28 AM

John, Channel Isles wrote:

Yes, I've read the letter sent to the UN Secretary General, Ban Ki-Moon, by 100 scientists. It was sent the month he enjoyed a jolly to Chile and helicopter ride over Antarctica (Nov '07) and came back saying he now believed, more than ever before, that a global calamity awaited us if we did not act!

I don't know who his tour guides were but the 2007 IPCC Report that landed on his desk earlier in the year states quite clearly Antarctica hasn't changed temperature in the last 50 years! Maybe he doesn't read his own UN IPCC Reports?

Your explanation of what is and isn't included in the IPCC's GCMs suggests scientists worldwide need to 'lobby' (more effectively) the IPCC for the inclusion of missing basic climate science.

How big factors like the radiative forcing of CO2 and its limits around 22 ppm can be 'skipped' and the cloud albedo 'omitted' for any scientific body serious about researching climate is disturbing.

What mechanism is there for the representation of such factors (or adjustment) into the IPCC's considerations?

The problem with the IPCC as stated in many quarters of the scientific community is from the outset the IPCC was a political animal. The science is only half the story. The IPCC authors (political appointees) have been accused, even by IPCC's own scientists, of making-up script in the Reports with cursory references to the science presented to the body.

It needs political will at the UN to change this situation and realisation in public the IPCC predictions are not really worth the paper they're written on until important factors are included in their GCMs. The majority of governments (China, India, Russia, etc.) outside of Europe do not believe in this AGW theory.

They appear to be 'the easiest route' of countries the scientific community to lobby for changes at the IPCC.

[*RSJ: The IPCC is a servant of the UN, trusted by the Secretary General, whoever might hold the post. Nothing external is likely to break that trust. Nor does the Secretary General appear to have any duty to guarantee the quality or integrity of UN agency reports, nor even to act upon them. He can't be lobbied.*

[*Published, peer reviewed articles in professional journals take no significant exception to the IPCC reports. Many of these papers are available in the archives of government or quasi-government agencies around the world.*

[*The IPCC Assessment Reports are huge and complex, filled to the brim with a background of mind-numbing but solid science. High placed political figures can't be expected to read these Reports, much less comprehend them. An especially well developed scientific literacy might be sufficient in individuals to recognize that what is being advanced as science is at best a conjecture. However, discovering the fatal flaws in AGW is too much to expect of any figure in government or his staff.*

[*Take for example the cloud albedo problem. If the AGW advocates hiding behind the IPCC and peer review were to surface to answer this challenge, they would say that cloud albedo is thoroughly discussed in the IPCC Reports. They would point to treatments of the cloud formation by aerosols (perhaps the best written and researched sections in the Reports), to the greenhouse effect of clouds, to the reflectivity of clouds at different levels in the atmosphere, and to the representation of cloud cover by parameterization, all reflected in their global climate models. It takes scientific training, research, and some reading between the lines to discover that notwithstanding what has been included, none of these GCMs reproduce the strong negative feedback of cloud albedo. They do not model the dynamics of cloud cover in response to the higher specific humidity caused by global warming, whatever the source.*

[*Political will to resist is pointless at the U.N. It is needed instead wherever the next step is contemplated to stave off the threat of Anthropogenic Global Warming, and especially in the United States. The current President has taken the sound advice of someone not to respond to the carbon threat. The next President has made clear that he is convinced of the danger, and that that should be sufficient for action.*

[*Sound science applied to disassembling what the IPCC has perpetrated might bring scientists with influence to create more people like U.S. Senator James Inhofe. That is the hope behind this blog.*

[*A lot of money is going to be wasted on this effort, and nothing good or even positive will come of it. Even if the increase in CO2 could be reversed, it would have no effect on temperature.*

[*The IPCC considered the weak CO2 emitted by human cement product (about 3% of the total emissions), but ignored the respiration of humans, which is almost thrice as large and grows with the population. As man tries to survive in the Green Utopia without burning fossil fuels, he will walk more, and bicycle more, and exert more manual work, increasing his VCO2. (I wonder what Michael Phelps' VCO2 is.) Man will engage more horses and oxen for transportation and work, and add their VCO2 to the atmosphere. He will switch to biomass fuels. We need a computation to determine how much loss in efficiency is necessary to cause carbon emissions to increase.*

[*Salvation might lie from the likes of the countries you mentioned, China, India, and Russia. Their leaders lack the opportunities and wisdom of Western Bachelor of Arts degrees to pursue anything so improbable and contrary to their self-interest. The next President and legislature of the U.S. could be susceptible to the argument that we can't have any effect going it alone, or to the pettiness of "hey, they're not doing it!"*

[*Meanwhile, Earth will warm or cool from natural events, exactly as though neither man nor CO2 existed.*

Posted by John, Channel Isles | August 26, 2008 7:46 AM

John, Channel Isles wrote:

Dear Dr G,

A BBC report (Oct 2007) claimed a 10-year study in the North Atlantic showed CO2 ocean uptake had halved between the mid-90s and 2000 to 2005.

The scientists believe global warming "… might get worse if the oceans soak up less of the greenhouse gas... there were grounds for believing that, in time, the ocean might become saturated with our emissions - unable to soak up any more."

Further their report claims that would "leave all our emissions to warm the atmosphere. Of all the CO2 emitted into the atmosphere, only half of it stays there; the rest goes into the 2 main carbon sinks (biosphere and oceans).

The BBC report was quoting the Schuster and Watson study, I believe.

http://news.bbc.co.uk/2/hi/uk_news/7053903.stm

Just as I cannot imagine our atmosphere reaching "saturation" points of CO2 when it s only a trace element (0.038%) I also cannot imagine the oceans reaching a saturation point anytime in the next 20 million years!!!

Que 1). What are the current ocean levels of CO2 and is there a saturation point?

[*RSJ: According to the IPCC, the ocean holds 38,000 GtC, of which 37,000 GtC is in the form of Dissolved Inorganic Carbon (DIC). "Seawater can, through inorganic processes, absorb large amounts of CO2 from the atmosphere… ". AR4, ¶7.3.4.1, p. 528. The IPCC shows that over geological time, the atmosphere has held 20 times as much CO2 as it has at the present, and for a relative recent, continuous period of about 20 million years, it had a level of one third the present. Where did that CO2 go? The answer is, into the ocean buffer capacity. A more sophisticated question is, what was the CO2 concentration in the ocean when the atmospheric concentration was over six and a half million parts per million? The answer from Henry's Law is that it was about 20 times the concentration today.*

[*The IPCC doesn't quibble about some ultimate capacity to hold CO2. The ocean likely has sufficient capacity to absorb the CO2 produced by the entire stock of about 3500 GtC of fossil fuels (AR4, Figure 7.3, p. 515). Its AGW conjecture is that the ocean can't absorb it as fast as the rate of production ACO2. It says,*

> The marine carbonate buffer system allows the ocean to take up CO2[(g)] far in excess of its potential uptake capacity based on solubility alone, and in doing so controls the pH of the ocean. This control is achieved by a series of reactions that transform carbon added as CO2 into HCO3(-) [bicarbonate ion] and CO3(2-) [carbonate ion]. These three dissolved forms (collectively known as DIC) are found in the approximate ratio CO2[(aq)]:HCO3(-):CO3(2-) of 1:100:10 … . AR4, Box 7.3, p. 529.

[*and*

> The availability of carbonate is particularly important because it controls the maximum amount of CO2 that the ocean is able to absorb. AR4, ¶5.4.2.4.

[*The slow absorption is a model the IPCC invented so that the increase in the last 50 years measured at Mauna Loa would be caused by man, its preconceived notion necessary for the catastrophe and all the good news that that entails. Its model involves putting constraints on the exchange between the atmosphere and the ocean such that the ocean is perpetually in thermodynamic equilibrium. Like the drunk looking for his keys under the lamppost, chemical equations are solvable if equilibrium is assumed. In fact, it is never in that state, and the IPCC has no model for the carbon cycle in any state of disequilibrium.*

[*On the other hand, the process of solubility is known only for the state of equilibrium. The IPCC would revise Henry's Laws of solubility. But this dissolution is a kinetic process, and as the IPCC admitted in a draft report and then deleted, it happens "instantaneously". At least it's fast enough compared to the biochemical processes which approach equilibrium on time scales of centuries to perhaps a dozen millennia. Consequently, expect the uptake of CO2, the process called solubility, to push the ocean into disequilibrium in the mixed surface layer, which then acts as a buffer for the biochemical processes to proceed at their separate paces.*

[*In short, given the present state of the oceans, identified perhaps as having a developed thermohaline circulation (THC), no practical limit exists to the capacity or the rate of the ocean to absorb CO2.*]

Que 2). Are the ship measurements accurate, if so what would account for the 50% decline in ocean CO2 absorption. If not accurate why, are they measuring fluxes in ocean currents mistakenly (i.e., the same 'patch' of ocean which may have annual fluxes in CO2 as warm currents enter the area)?

[*RSJ: Until proven otherwise, let's assume the measurements are accurate, and cast no aspersions on the investigators and crew.*

[*Now take a look at the Takahashi diagram of the ocean atmosphere exchange at AR4, Figure 7.8, p. 523. The ocean is broken into 1759 cells of 13 flux bands. Eleven of those bands have a width of 0.5 moles per meter squared per year. A 50% variation in some of those cells should be chalked up to regional or weather variations.*

[*The story is quite different for the remaining two cells. One is eight times larger than the majority, and represents the uptake of CO2 at*

the coldest spots, in the RJS model forming the headwaters of the THC. The other is seven times as large, and represents the outgassing from the THC primarily in the Eastern Equatorial Pacific, plus a bit in the Western Indian Ocean and another bit off Aleutians. If these were to change by such a percentage, the composition of the atmosphere would be undergoing a radical change.

[*After the THC outgassing, the surface ocean heads poleward, cooling and continuously absorbing increasing amounts of CO2. Absorption occurs at variable rates, depending on major and minor weather and ocean current phenomena. In the end, though, the concentration is one atmosphere's worth at the temperature of ice water. How the water got to that state, 50% more here, less there, makes no difference.*]

I found the above in a RealClimate article (Nov 07) purporting there's more studies showing the oceans are "getting fed up absorbing all the extra CO2". So just the usual fatalistic green mind-set imposed on science and nature then!!

See posts 3, 13 and 39. Can I ask you to comment on the article and the posts mentioned please.

RealClimate Link. http://tinyurl.com/5va727

[*RSJ: The sum knowledge of a committee is proportional to the number of members. The IQ of a committee, however, adds like resistors in parallel: the total IQ is the reciprocal of the sum of the reciprocals of the IQ of each member. The IQ of a library is zero. So it is with Legislatures, the Consensus on Climate, and RealClimate.org. This is why science advances by individuals, and not by committees, and why the peer reviewed literature is in such a sorry state.*

[*The article you referenced and the article it referenced are both by "David", who is likely Professor David Archer, a highly respected expert in computational ocean chemistry at the University of Chicago, often cited in the IPCC Reports and himself a contributing author to both the IPCC and RealClimate.org. He has posted several quite helpful papers online. His knowledge of the ocean is extensive, and trivializes the storehouse of RSJ's ocean information. Nevertheless, his ultimate concept of the carbon cycle, safe to say, is incorrect.*

[*Archer is likely the source of the following submodels. (1) The ocean absorbs CO2 according to multiple processes with differing time constants which either switch on and off, or follow a process that channels the flow of CO2 into the different processes. (2) The Revelle buffer factor is the ratio of the rate of change of CO2(aq) to the rate of change of DIC. (3) Chemical equilibrium in the ocean constrains solubility. None of these is valid.*

[*David says,*

> If changing climate were to cause the natural world to slow down its carbon uptake, or even begin to release carbon, that would exacerbate the climate forcing from fossil fuels: a positive feedback.

[*In the following, assume the atmosphere is a by-product of the ocean, and that the biosphere effects while large are compensating, so that in the net they are negligible.*

[*Changing climate will not affect carbon uptake, at least until the THC as we know it ends, the ocean is substantially ice covered, or the ice caps are gone. The **release** of carbon is perpetually underway, and it is sensitive to the global average surface temperature (GAST). Notwithstanding that fossil fuels have a positive effect on the sum of the greenhouse gases, and notwithstanding that greenhouse gases have a positive effect on the GAST, the effects are trivial and compounding, mitigated twice by water vapor, once as a GHG but first as Earth's albedo. A feedback exists, but it is trivial and unmeasurable.*

[*Because the feedback is minute, the amplification of the ice age recoveries is not amplified as David and the IPCC claim. This is a conjecture AGW believers invented to correct for premature conclusions about CO2 and climate from the paleo record, too good not to be true until the discovery that CO2 lags temperature, not the reverse.*

[*The stratification David discusses would be irrelevant, if it existed. David's model, like the GCMs and that of Revelle and Suess (1957) is mostly vertical, but the ocean has an even more powerful and dominating lateral component. The surface ocean perpetually cools from the outgassing to the uptake in the THC, taking in more and more CO2. Good of David to mention Henry's Law, though! The IPCC did not rely on it in either of its two most recent reports. But at that, David discussed the pCO2 differences, admittedly negligible, but ignored the temperature dependence of Henry's coefficient.*

[*In his referent paper, David decides we shouldn't "push the big red Stop the Press button down at IPCC". What needs pressing is the Big Red Stop button for the whole of the IPCC.*

[*Re Comment #3 to David's article, kudos to David for criticizing the terrestrial models that are "all done by difference." The entire IPCC AGW model suffers from two aspects of this general science problem. One is that it deals with the small differences between huge numbers, a classic faux pas of the tyro. The large numbers are the natural processes, and the small differences, the IPCC attributes to man. This presumes that the models are additive, equivalently that they are linear, and this is the backbone of the whole of the radiative forcing paradigm on which the IPCC relies. Simple models, like Henry's Law, have nonlinear aspects, e.g., absorption is proportional to pCO2(g) but outgassing is inversely proportional to it. The problem with the small difference in large numbers is that the variance of the difference is the sum of the variance of both the large numbers. An alarm should ring in reading IPCC Reports every time the word "net" appears, explicitly or implicitly. This includes every radiative forcing number, and every reference to a few Gigatons of uptake.*

[*The biosphere is negligible because the net uptake and outgassing to the atmosphere is quite small, and because the isotopic ratio is the same in each direction. The fluxes are large, especially considering the volume of leaf water, which the IPCC introduces then ignores. But consider a three box model for the climate, land, sea, and air. Because the input and output to the land are nearly the same (within the accuracy of any kind of modeling), the input can be shorted to the output for the land and for the air on the land side, and the*

model won't know the difference.

[*As a bonus, take a look at David's response to Comment #9. His answer here assumes chemical equilibrium in the surface layer, and that that constrains solubility. Neither is true.*

[*Re Comment #13, like David, no comment. What caught your interest here?*

[*Re Comment #39, again there is no response from David. The writer speaks of the problem with the kinetics of biological reactions (685 GtC DOC), but these are trivial compared to the problems on the inorganic side (37,000 GtC DIC). The size of the components shows the relative importance on one scale, but the problem on the inorganic side is what the writer calls "pure equilibrium chemistry". In the real ocean, equilibrium essentially exists with respect to solubility because of its soda-pop-quick reaction time, once called instantaneous by the IPCC.*

[*The reactions that form the ratio of [CO2(aq):[HCO3(-)]:[CO3(2-)], the components of DIC, are only known in equilibrium and at specific total concentration, pressure, temperature, and salinity. (Research the Bjerrum diagram or graph and its origins.) The same thing holds for the Revelle Factor, as revised by the IPCC. Thermodynamic equilibrium, as applied with the Gibbs' free energy potential, which defines the state of chemical equilibrium, is such a weak force that it is unlikely to ever reach its final state in the open ocean. The Bjerrum relationships and the Revelle Factor do not constrain solubility. The pH of the ocean is not determined by the rates of chemical reactions and hence the concentrations of the three components except at a hypothetical equilibrium.*

[*Each parcel of surface water is perpetually cooling, among other things, and absorbing more CO2 during its lifetime. In a vertical model based on a network of cells, the surface is constant, but this is like a standing wave, a phase phenomenon in particle motion. The model might treat the properties as a constant, but the lateral currents perpetually replenish the parcel. The surface segment might have any component ratio, quite unlike that at equilibrium. The values might be constant, at least under suitable assumptions, or in steady state, but never in equilibrium.*

[*Lack of appreciation of the phase structure of cell parameters has led some investigators and the IPCC often to treat the ocean and the atmosphere above as stagnant. This problem is compounded by processes too complex, or of the wrong scale for the model, to be parameterized (parametrized, Br.), meaning in IPCC parlance that the process dynamics get replaced with a constant value that looks about right statistically. This destroys feedback, a phenomenon about which the IPCC obsesses, but with little understanding and invalid modeling.*]

Posted by John, Channel Isles | August 31, 2008 10:09 PM

David Pratt wrote:

Dear Dr Glassman,

Many thanks for your response to my comments of 24 August. Here are a few observations on Engelbeen's sources, on the off chance that any of them are new to you.

[*RSJ: See link posted by David on 8/24/08 and comments by RSJ.*]

The IPCC sees AR4 fig. 7.8 (Takahashi) as evidence that the oceans are net sinks rather than sources of CO2. In the caption to that figure, it gives figures for the uptake and outgassing of anthropogenic CO2 (which apparently doesn't like to mix with natural CO2!) that are the same as those given in its fig. 7.3, but this time it fails to mention the error margins of +/-20%. Fig. 7.8 is similar to the following chart for 1995 sea-air flux:

http://www.pmel.noaa.gov/pubs/outstand/feel2331/images/fig06.jpg.

This appears in a freely available article cited by Engelbeen: Feely, R.A., et al. (2001), Uptake and storage of carbon dioxide in the ocean: the global CO2 survey, Oceanography, 14(4), 18-32,

http://www.pmel.noaa.gov/pubs/outstand/feel2331/feel2331.shtml.

Engelbeen says that surveys over time have shown that parts of the ocean that were net sources of CO2 gradually changed into net absorbers, citing a 2007 presentation by Metzl:

http://ioc3.unesco.org/ioccp/pCO2_workshop/Presentations/metzl-SOCOVV-Final2.pps.

[*RSJ: The Metzl slide show (pps) is about the Southern and Indian Oceans, so is a regional analysis with no obvious or, perhaps, relevant connection to the GLOBAL warming conjecture. It includes maps showing the crisscrossing tracks of the cruises to gather data. Using the Takahashi diagram on which the IPCC relied, these treks are much less interesting than would have been an exploration of the regions of intense outgassing and the polar regions where the cold, CO2 saturated water descends to depth.*

[*However, Metzl shows a more recent Takahashi diagram, dated 2007, which has a remarkable, qualitatively different scaling. The colors on the map are discrete (as they must be). but the color range of the key is continuous and of poor resolution. The scale for 2007 is uniform, but nonlinear for 2002. The 2007 chart may also differ in that it represents a particular date and time (GMT 1/19/07 16:23:06), whereas the IPCC's version is an average of data collected from 1956, normalized to 1995, covering about 41 years, and published in 2002, and therefore preferable. The cell sizes appear to be about the same, but the 2007 version seems to lack the intensity of outgassing and polar uptake, especially in the targeted southern hemisphere. If the ocean flux follows a uniform gradient from uptake to*

outgassing, more like the 2007 version, then data sampling might as well be uniform across the seas. If the ocean behaves more like the 2002 version, than sampling should emphasize the high intensity regions.]

In support of his arguments regarding carbon isotope ratios, he cites, among other things: Battle, M., et al. (2000), Global carbon sinks and their variability inferred from atmospheric O2 and d13C. Science, v. 287, Böhm, F., et al. (2002), Evidence for preindustrial variations in the marine surface water carbonate system from coralline sponges, Geochem. Geophys. Geosyst., 3(3), 1019.

[*RSJ: Here David provided two pay-per-view links, one a substitute for Engelbeen's pay-per-view link to his Reference 12 (Battle et al.) and the other identical his pay-per-view link for Reference 15 (Böhm et al.). This is not good scientific practice, but it is the technique employed by the IPCC to a fine art. A scientific article should be self-sufficient, fully quoting the relevant material from sources, whether copyrighted or not, which the law in the U.S. allows. References must be supplied, but only to verify that the article quoted the source correctly, and not to send the reader off on a data search.*

[*Many of the articles referenced by the IPCC do not support the claims made for them, but instead are merely professional stroking. The cost to an individual to debug the IPCC Reports would run into the tens of thousands of dollars, and much of the cost would be a pure waste. The United States should enforce the Freedom of Information Act on the IPCC, requiring every citation be made available in searchable format via the internet. That should be done before the first thing is done in reaction to its AGW alarm.*

[*The chronic reminder here is that there would be no climate crisis but for the IPCC. Alternative claims, whether supporting or not, are irrelevant. This turns out not to be a big problem at all. The IPCC Reports cannot stand scientific scrutiny just under their own weight.*]

The graph Engelbeen uses to determine a correlation (R^2) of 0.997 between human CO2 emissions and the atmospheric CO2 increase is shown on his website (section 5.2) but he doesn't give any details of the calculation.

Regards,

David

[*RSJ: Any such extraordinary correlation as 0.997 in the climate realm should be viewed with great skepticism. Engelbeen says in the opening line of his paper,* CO2 Measurements*, "In climate skeptics circles, …". Skepticism is a virtue in science, though certainly not every scientist exhibits it. However, where skepticism doesn't exist, as in the IPCC, science has left the building. In this instance, Engelbeen's conclusions are incorrect. He says in his ¶5.1,*

> This proves beyond doubt that human emissions are the main cause of the increase of CO2, at least over the past near 50 years. But there is even more proof of that...

[*Engelbeen's ¶5.1 is called "The mass balance". Here he states,*

> The amount of CO2 emitted by humans nowadays is about 7 GtC/yr (CO2 counted as carbon). The increase in the atmosphere is about 4 GtC/yr. That implies that there is little to no increase in the atmosphere due to other causes, or the amount in the atmosphere in the case of a natural unbalance should be higher than the emissions, not lower.

[*The datum implies nothing of the sort. He infers it.*

[*Moreover this is bears little resemblance to a mass balance analysis, especially because it ignores the natural flux, coupled with the fact that the ocean uptake and outgassing are known by Henry's Law, which, despite its linear appearance, happens to be nonlinear. This means that unless one discounts solubility, the natural and anthropogenic fluxes are not additive. How the mass balance must be done is the subject of the next paper to be posted on the RSJ.*

[*Furthermore, in the isotopic analysis by Engelbeen and the IPCC, the calculation of the mixing ratio of natural CO2 and ACO2 is missing. Another mass balance computation is needed to show whether the lightening of the mixture is correct for the addition of the two components.*

[*Engelbeen refers to the "very accurate measurements of CO2 at Mauna Loa." RSJ would have preferred him to say "precise measurements". The MLO measurements show precision in the repeatability of the seasonal cycle and in the low variance relative to the first and second order trend lines. However, accuracy requires that the MLO measurements be close to whatever it is that they are supposed to represent, the background CO2 level in Hawaii or the global average CO2 concentration. The IPCC shows that the MLO and South Pole measurements overlie one another with great precision. TAR, Figure 3.2a, p. 201. This accuracy may be the result of "internetwork calibration". However, as stated here repeatedly, SPO sits in a sink of CO2 uptake, and MLO in the plume of the Eastern Equatorial Pacific outgassing, and Keeling warned of the danger in comparing such records. The record at MLO is likely the precise and accurate, wind modulated, secularly varying CO2 concentration of the outgassing plume.*

[*Finally, Engelbeen and the IPCC imply that the 100% of natural CO2 is absorbed by the ocean annually, but only about 50% of ACO2 is absorbed. Neither gives any physical reason, but just leaves Henry's Law violated with no justification. My opinion is that any variation in solubility due to isotopic weight differences would not be measurable, lost in the noise of CO2 flux estimation. Mass balance and the analysis should respect the laws of solubility.*]

Posted by David Pratt | September 6, 2008 12:52 PM

John, Channel Isles wrote:

Hi Dr G,

Since learning about CO2's (limited) radiative forcing I've received this comment on a blog which I'm not able to answer: "The major infrared absorption bands of CO2 are indeed saturated at sea level, but, and this is a big but, as you go higher in the atmosphere the pressure and density fall. This means that you eventually reach an altitude where the bands are no longer saturated. This altitude increases as the concentration of CO2 rises. Consequently as man adds to this concentration the insulating blanket of the atmosphere effectively thickens and the earth's temperature rises."

[*RSJ: The problem you pose is not well-stated. Like a mixed metaphor, it combines two quite different modeling concepts, radiative forcing and infrared absorption. Radiative forcing is the IPCC's elected paradigm with which to model climate. It contains an underlying assumption of equilibrium for natural processes, to which it assumes increments due to man might be added (the problematic linear assumption) as if they were radiation equivalents. Infrared absorption relates to the passage of energy through a medium from a hot surface to a cold surface. The latter is thermodynamic modeling; radiative forcing is not. Thermodynamic modeling involves the passage of energy and material between elements at different temperatures, each with its own heat capacity, and a characteristic resistance of the medium impedes the flow, whether by radiation, convection, or conduction. The thermodynamic model may be linear or nonlinear, according to whatever works.*

[*In contrast with thermodynamic modeling, radiative forcing has no flow variable, and does not model the temperature or heat capacity of all the elements. Radiative forcing has no obvious way to assess the closed loop gain of a particular feedback.*

[*Reading between the lines of the IPCC's Third Assessment Report, one sees that radiative forcing has met with only limited success, and despite strong criticism from unnamed sources, required the staunchest defense. See especially TAR, Ch. 6,* Radiative Forcing of Climate Change, Executive Summary*, p. 351, and ¶6.1* Radiative Forcing*, ¶6.1.1* Definition*, p. 353. The IPCC has even had trouble defining radiative forcing.*

[*The Executive Summary paragraph says,*

> Radiative forcing continues to be a useful tool to estimate, to a first order, the relative climate impacts (viz., relative global mean surface temperature responses) due to radiatively induced perturbations. The practical appeal of the radiative forcing concept is due, in the main, to the assumption that there exists a general relationship between the global mean forcing and the global mean equilibrium surface temperature response (i.e., the global mean climate sensitivity parameter, λ) which is similar for all the different types of forcings. Model investigations of responses to many of the relevant forcings indicate an approximate near invariance of λ (to about 25%). There is some evidence from model studies, however, that λ can be substantially different for certain forcing types. TAR, Ch. 6 *Radiative Forcing of Climate Change, Executive Summary*, p. 351.

[*Here are the first confessions of trouble with the radiative forcing paradigm -- "continues to be a useful tool" despite its failures; "to a first order", meaning don't ask for nuances, like transient, coupled, or nonlinear responses. But what follows next is the IPCC's dawn of discovery of thermodynamic modeling. The climate sensitivity parameter is first of all significant because of its near constancy. Secondly, as shown from its definition at equation 6.1, (TAR ¶6.2, p. 354), it has the units of T°C per watt per square meter. It is the parameter characteristic of a blanket, and the atmosphere is a blanket. It is a thermodynamic resistance, being careful of the sign, and provides in this instance the heat drop across the atmosphere as energy flows from the surface of Earth to the heat sink of deep space.*

[*What this all means is that if λ is approximately a constant it characterizes the greenhouse effect, and one need not bother with the fine structure of the atmosphere. Using λ, we don't care about where the resistance occurs, whether in the bottom, middle, or top of the troposphere, the stratosphere, or anywhere else. We only care about the end-to-end effect, and we don't care because λ is nearly invariant.*

[*This is analogous to the problem of ocean absorption of CO2. We don't care how it is absorbed along the currents from equator to the poles because at the end, the absorption is close enough in equilibrium with ice water. Fine structure of the climate, whether horizontal or vertical, is instructive for learning about the climate and predicting weather, but it tends to be a distraction in the ultimate, macroparameter problem of the thermodynamics of Earth and GAST, the global average surface temperature.*

[*So if one wants to model the temperature profile of the atmosphere, such matters as the height of the troposphere, or points where the radiation absorption shifts from water vapor to CO2, are important. But taken as a whole for the purpose of assessing GAST, its rather irrelevant.*

[*From another viewpoint, energy in the absorption bands of CO2 is sharply attenuated in the atmospheric surface layer, mostly from water vapor, plus a little from CO2. What gets past the surface layer in the CO2 band will be subjected to absorption by just CO2 in the stratosphere, but the surface warming effect from that level is nil.*

[*The part of the argument dealing with the altitude relies on the parameter of the rate of absorption per unit distance, or thickness. This is a refinement of the problem, and another bit of a distraction. If your absorption data are in the form of attenuation per meter, you need to be mindful of the layer thickness. This might be the case if your data are the power spectral density of the absorption.*

[*On the other hand, if your data represent the attenuation of, say, a set of layers, then the thickness has already been taken into account. When we talk about the absorption band of CO2 being "saturated at sea level", the data graph we contemplate probably is indistinguishable from 100% at the peaks of the curve, and we are referring to the total absorption through the surface layer, or more. The thickness of the surface layer is no longer a parameter, so long as the data are valid, and the thickness of the layers above doesn't matter in the band of concern where the absorption was already nearly complete.*]

I presume this is referring some how to the 'hot spots' theory the IPCC claims their computer models reveal in the upper

atmosphere. I've read a Science & Public Policy Institute article (link below) that shows the claimed hot spots do not appear in the observed data.

[*RSJ: If you don't mind, I'll skip the external reference. The IPCC tries to model the ocean and atmosphere as multiple, vertical layers, perhaps giving each some characteristic radiative forcing. We really don't want to debug the finer workings of that radiative forcing model, considering its gross errors and inconsistencies.*]

The SPPI article states "In the plot from the Hadley Centre's radiosondes, showing actual, observed temperatures in the troposphere as predicted by 5 IPCC computer models, the repeatedly-predicted "hot-spot" signature of anthropogenic greenhouse warming is entirely absent. Indeed, very nearly all observational data on mid-tropospheric temperature trends over the past half-century show no tropical "hot-spot" at all."

[*RSJ: So Hadley confirms that one little aspect of the IPCC's radiative forcing model doesn't work. It's a straw in the backpack, but the camel's already down.*]

I also cannot see how CO2 can 'change' its forcing just through altitude! Can you advise please?

[*RSJ: CO2 has a certain, characteristic absorption band, as given by charts compiled from experiment, grossly approximated by analytical modeling, and valid in some, usually unstated temperature and pressure band, and in units such as per meter or per meter per wave number. For the characteristic band to be valid, the CO2 has to be gas, and neither a liquid nor a plasma, and perhaps has to be under some light pressure, making it somewhere close to an ideal gas. If the temperature and pressure don't seem to fit these assumptions, set up an experiment to measure the band under the appropriate conditions.*

[*The CO2 isn't changing, but, in a couple of different ways, the model of its effects is. My advice is don't bother with radiative forcing except to debunk the IPCC. For a reality check, keep in mind a separate thermodynamic concept for climate processes - nodal temperatures with heat capacitance including heat sinks, heat flow (redundant, I know) through resistances.*]

Link. http://tinyurl.com/23u6ae

Thank you again for your help.

Posted by John, Channel Isles | September 7, 2008 11:24 PM

John, Channel Isles wrote:

Sorry, the blogger made this comment too: "Additionally the higher layers of the atmosphere are colder and so radiate less heat into space."

I think this blogger is trying to attach two unrelated issues in order to make a point that's not there (i.e. be a smart-arse)!!

[*RSJ: The concept of a layer that absorbs, hence warms, and then itself radiates is common in the IPCC and its sources. I'd like to see more of this idea developed somewhere. It is common for a microwave reflector, which is the model of a mirror, and indeed a necessary model where the Doppler effect applies. But in the microwave model, the reflector absorbs 100% of the radiation, and reradiates much of it. For a layer of stratosphere, however, we would need to know its absorptivity, its reflectivity, and its transmissivity, and model the fate of all three processes. This seems like a horribly complex way to model the atmosphere, cut into arbitrary layers interconnected to every other layer through transmissivity or reflectivity. Unless we want to model inversion layers, for example, the whole problem can be avoided for assessing the global average surface temperature by using λ and the notion of thermal blankets.*

[*In spite of the vast knowledge contributed by the Ray Pierrehumberts, Nicolas Grubers, and David Archers, the IPCC, the Consensus on Climate, and all supporting peer reviewed technical journals, can't model feedback coherently, nor equilibrium, and, once we see the IPCC's layer re-radiation model, I'll bet you can add that, too. The IPCC breaks down not just in thermodynamics and system modeling, but at the transcendent levels of the ethics and principles of science.*

[*The committee trumps every member. IQ adds like resistors in parallel. The committee is dumber than the dumbest member. And less principled than the least.*

[*Was your blogger friend on the committee?*]

Posted by John, Channel Isles | September 7, 2008 11:35 PM

John, Channel Isles wrote:

No my blogger 'friend' was just another hysterical comrade of the socialist agenda behind this climate fraud (I call it fraud now because it involves winkling huge sums of money off taxpayers).

The IPCC committee, or Report authors, are indeed "less principled than the least" and having seen one debate on ABC Australia (a biased attempt to debunk the 'Great … Swindle' film) they appear to be very smart with language, as I've seen from IPCC reports, to bamboozle people with word-play into submission.

[*RSJ: John refers to the Great Climate Warming Swindle, an excellent and highly commendable UK documentary debunking the AGW conjecture. It can be seen with French subtitles at*

http://video.google.fr/videoplay?docid=-4123082535546754758

[*It does have flaws, and could be strengthened in several ways, but the message would not change. To see some of the anti-anti-AGW arguments, visit Wikipedia at*

http://en.wikipedia.org/wiki/The_Great_Global_Warming_Swindle

[*I recommend visiting the Wikipedia site first, then watch the movie, even watch it again if you've seen it once. Professor Carl Wunsch appears several times in the documentary, and now regrets it. The documentary had no opportunity to misquote him, and whether his quotes might have been out of place is highly subjective and not at all obvious in the viewing.*

[*Eigil Friis-Christensen took issue with a graph depicting his research, and the producers admitted to an error in that graph. He understates his case with such obtuse phrases as "We have concerns" and "we have reason to believe". He admits the narration in the film "is consistent with the conclusions of [his] paper", but complains that it incorrectly omitted a contribution by ACO2.*

[*In fact an error did exist in the presentation of his data, but not the omission of which Friis-Christensen complained. The discovered error is not clearly explained in Wikipedia, but it seems that a gap or gaps in data from 1610 to 1710 were bridged with a line or lines.*

[*This graphical technique is precisely what the IPCC does in connecting the sparse data points in ice core data, as shown in the documentary and the IPCC Reports. This is scientifically acceptable, although some representations are less ambiguous than others. However, the IPCC concludes from its follow-the-dots technique that the temperatures in this and the last century are unprecedented over the last hundreds of thousands of years. Considering the scarcity of ice core data, the confidence level in the IPCC assertion is no more than 3%, a fact it ignores, even though the IPCC goes to great lengths to make its subjective opinions appear objective simply by assigning arbitrary probabilities.*

[*Wikipedia quotes Friis-Christensen as saying,*

> I think several points were not explained in the way that I, as a scientist, would have explained them ... it is obvious it's not accurate.

[*So it always must be in communicating science to the layman.*

[*Another graph had a mislabeled time axis, which the producers corrected for subsequent showings. Also the effects of volcanoes may have been overstated, and certainly the IPCC would not agree.*

[*The Great Global Warming Swindle shows the tragic effect environmentalists would have in Africa by diverting development of conventional electricity generation to exotic alternatives. This would not be the first time environmentalism produced a human catastrophe greater than the total effects of socialism in all its guises. DDT had reduced the number of deaths from malaria from perhaps tens of millions world wide to a few tens of thousands per year. The selective banning of DDT manufacture and its use in agriculture, all in the name of environmental theory, appears to have substantially reversed those gains, and the mortality rate is climbing back to 10,000 a day. Rachel Carlson shares something in common with Hitler and Stalin.*

[*The GGWS does a good job of putting the AGW conjecture into perspective with global climate as it has been known. There have been a couple of extended and prosperous eras far warmer than the present. From a higher perspective, the documentary might have featured how stable Earth's climate is. Climatology should have sought the explanation for that stability, and estimated its margins. Instead, they have conjectured that Earth is unstable, at one of James E. Hansen's "tipping points", ready for catastrophe. Long ago, Hansen predicted we were 10 years away from his tipping point. He still says so today. We're at t minus 10 years and holding, and have been for more than two decades according to him.*

[*Two fundamental precepts of science are violated by this tipping point nonsense. One is that science routinely finds unstable objects in the universe, like supernovas everywhere. Cones are not found standing on their points, nor round boulders perched on the sides of hills. Earth is in a quasi-stable state, and not ready to explode. The other is the prerequisite that a model make predictions that become validated before they are ever used for pubic policy. The GCMs make no such predictions, and so can never be validated. Hansen's little prediction might have been such a qualifying prediction, except that it simply failed.*

[*The GGWS documentary might have noted that the IPCC specifically ejected the galactic cosmic ray model for cloud formation for lack of evidence. The data show however that CGR intensity is more strongly correlated with global climate than is El Niño. See* ***Solar Wind, El Niño/Southern Oscillation, & Global Temperature: Events & Correlations*** *in the RSJ.*

[*The Swindle would be stronger if reinforced with the specific, flagrant errors in the IPCC Reports and its GCMs. The two major examples are that the GCMs simulate neither the carbon cycle nor the hydrological cycle correctly. They omit the positive feedback of ocean outgassing, and the negative feedback of temperature to water vapor to cloud cover. The first frustrates the IPCC's conjecture about CO2 accumulation in the atmosphere, and the second accounts for Earth's climate stability, trumping the greenhouse effect.*]

What troubles is the 'Tax & Control' socialist agenda has moved from cars to aeroplanes and accelerated onto household products and even food in very short time. The IPCC's Dr. Pachauri is due at a global food conference aiming for a 60% reduction in meat consumption by 2030. The US EPA have already set rules for lawnmowers and outboard motors. The EEC have got all car makers jumping through CO2 hoops to align manufacturers with the Communist ideal all car makers are (should be) equal - even luxury brands Mercedes and BMW - or you'll be fined.

None of which will have the slightest impact on man's CO2 especially with so many major countries like China and Russia sticking 2 fingers up to Kyoto.

If the UN are looking for 'behaviour change' then I've certainly got the message. I'm following the US elections and rooting for the Republicans for the first time in my life as the lesser of two climate evils. If America votes Obama in it's the end of capitalism in Europe as the EEC will have a major partner in the socialist enviro-agenda across the Atlantic.

[*RSJ: John is talking about Rajendra Kumar Pachauri, chairman of the IPCC, and as such, co-recipient of the 2007 Nobel Peace Prize awarded to the IPCC and Albert Arnold Gore, Jr. "for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change."*

[*Pachauri has dual PhDs, one in Industrial Engineering and another in Economics from North Carolina State University.*

[*Yet Pachauri advocates cutting back on the world consumption of meat. For the sake of fanning the flames of his global warming conjecture, he would begin to reduce meat consumption and increase the incidence of iron deficiency anemia, which is already a global human health problem. No practical substitute exists for the intake of the heme molecule through the ingestion of red meat. IDA increases mortality in child birth, in the elderly, in heart disease, in grafts and organ transplant, in all surgery, in COPD, probably in the chronically ill, and undoubtedly in starvation.*

[*As it was with DDT, the human toll is irrelevant in the political calculus of environmentalism.*]

Posted by John, Channel Isles | September 8, 2008 11:09 PM

John, Channel Isles wrote:

Hi Dr G,

Roger Pielke Sr. has recently (July'08) criticised the IPCC again for omitting peer-reviewed literature, including 3 studies relating to temperature;

Matsui & Pielke, 2006, on "the aerosol effect on atmospheric circulations alteration in the heating of regions of the atmosphere is 60 times greater than due to the heating effect of the human addition of well-mixed greenhouse gases";

[*RSJ: This first paper says, with bold added,*

> A major conclusion is that, as a climate metric to diagnose climate system heat changes (i.e., "global warming"), the surface temperature trend, especially if it includes the trend in nighttime temperature, is not the most suitable climate metric. As reported by Pielke [2003], the assessment of climate heat system changes should be performed using the **more robust metric** of ocean heat content changes rather than surface temperature trends.]

A study based on Lin et al 2007, showing "warm bias in the construction of a global average surface temperature trend … explains about 30% of the IPCC estimate of global warming. In other words, consideration of the bias in temperature would reduce the IPCC trend to about 0.14°C per decade;"

[*RSJ: The second article says, with bold added,*

> We also introduced a **new temperature assessment metric** - *the near surface lapse rate. …*
>
> Our exploration of near surface lapse rate changes including wind effects should, therefore, be extended to longer-term time series as well as cover larger spatial areas.]

And Pielke et al 2007 "the outgoing long wave radiation is proportional to the fourth power of T [T^4], from Stefan-Boltzman's Law" and "spatial distribution matters, but the important distinction has been ignored" by the IPCC who should "evaluate the change of the global average of T^4 with time."

[*RSJ: The summary of the third paper says, bold added,*

> We present a measurement-based estimation of the spatial gradient of aerosol radiative forcing. The **NGoRF [Normalized Gradient of Radiative Forcing] is introduced** to represent the potential effect of the heterogeneous radiative forcing on the general circulation and regional climate.]

Pielke concludes "unless the climate science community returns to the proper scientific method of examining the climate system, policymakers will continue to be fed erroneous information. Only poor policy decisions can result due to this failure."

Link. http://tinyurl.com/6noneo

Are the IPCC getting better or worse regards methodology and best practice for assimilating and scripting reports with time with all the peer reviewed advise (criticism) they're receiving from the outside (skeptical) scientific community?

[*RSJ: All three papers are by Roger Pielke Sr. as first or second author, and published in Geophysical Research Letters.*

[*Each of the three papers urges changing the parameters of the problem, including even the statement of the AGW problem. Each might*

lead to a more accurate scientific model, one actually with predictive power and one which fits the historical record. But the IPCC has firmly established to the nonscientific world that climate is measured by the macroparameter of the global average surface temperature, GAST. Beyond that, it is dedicated, at all costs, to proving that manmade CO2 emissions cause a catastrophic increase in GAST. It is not dedicated to scientific objectivity or better models. Pielke is barking up the wrong tree.

[*Nor is the IPCC in any way a clearing house for scientific papers on climate. And even if it were a legitimate scientific agency, a mantle it does not deserve, it would be under no obligation to do so. The principles of science allow a scientist to build a model using selective bits of submodels, and even to build it upon selected pieces of data. However, if his model fails to fit all the data in its domain, as is the case with GCMs, it is invalid. Next, if his model makes a nontrivial prediction validated by subsequent measurements, it is eligible to be advanced to a theory (and only then used for public policy).*

[*Whatever a theory might omit is far from being to the discredit of the model. The more that a model can omit, the more is shown extraneous, the more elegant is the model, and the more preferred. Occam's Razor is to shave away the unnecessary. Of two models which fit the data identically and make the identical, validated prediction, the one with the least assumptions or fewest parts survives.*

[*Pielke should look to the end result of the IPCC modeling and identify where and why it fails. Then he would be in a position to set the modeling on the right track using alternative measurements and criteria.*

[*The IPCC produces a couple of reports a decade. It does not conduct a dialog with scientists and the public. It responds to criticism only as it might choose, and then in its reports. When it does respond, its technique is dismissive. This is the IPCC's methodology. It is bamboozle (I think I made a noun). It is consistent, but otherwise beyond the pale of science.*

[*Surrogates for the IPCC do speak for it in public, and they have contributed some good scientific dialog where the IPCC is silent. RealClimate.org is a good example, and a good resource for the wary. Still, RealClimate.org picks and chooses (forgive the idiom) its battles, and quickly resorts to slander and ad hominem attacks.*

[*Listen to the testimony of the scientists in The Great Global Warming Swindle.*]

Posted by John, Channel Isles | September 9, 2008 12:49 PM

Lucy Skywalker wrote:

This website is a "fantastic" (meaning no. 7) source of information and good attitudes. I seem to share very similar values as you, but I'm not a trained scientist, I've only been aware of the science fraud for six months; for the six months before that I was a totally committed catastrophic AGW supporter, on the strength of Al Gore, all the local concern groups, and all the checking of the science that I was able to discover from Gristmill's Coby Beck, New Scientist, etc.

[*RSJ: Just so all the readers are aware, fantastic meaning no. 7 is "extraordinarily good".* American Heritage Dictionary, online edition.]

With such a U-turn, and needing to deconstruct so much, I coped by writing it down into what became a Skeptics' Climate Science Primer at

http://www.greenworldtrust.org.uk/Science/Curious.htm.

[*RSJ: This is a blog called* Reclaiming Science *with the subtitle,* Skeptical Climate Science Primer. *A few minutes browsing through this work shows it could prove to be a most useful resource for the subject.* ***RSJ*** *would remind readers that skepticism is a virtue in science.*

Having had a lot of warm comments about it from the skeptics' community, I know I can recommend it - it also references other primers as well as a lot of sources that seemed good. I wouldn't mind if you like to look over it - it's always open to improvement. Early on I realized you had some vital science - but I found reading the long screeds that your pages have become, pretty intolerable. There was so much material to cover.

[*RSJ:A screed is a long discourse or essay, but it has the pejorative meaning of a diatribe or scraps of writing.*]

I feel that DISTILLING the research into the real science we need, is really important. It seems we simply cannot use the old formats. Peer-reviewing has corrupted, the traditional journals ban you, there are no textbooks as yet, scientists are reeling and confused, or simply shrug, or get together on Watts Up to laugh, or are still unaware of the "Hamlet's Uncle" business, or have been bought into silence and compliance. University courses would take too long and be too expensive and unhelpful with the work that actually is needed - Reclaiming Science - starting with something like Climate Science that has been particularly vulnerable to corruption. I'm reaching for this as my next project - but it's still "under construction" and my ideas are not clear or complete as yet.

[*RSJ: Agreed.*]

Now for the detail questions - these will get built into the primer:-

Do you know the figures for the solubility of CO2 in fresh water and seawater?

[*RSJ: A graph of the solubility of CO2 in water is Figure 6 of* **The Acquittal of CO2***, above. According to venerable Henry's Law, solubility depends on the partial pressure of CO2 above the water, and the temperature of the water. These remain the dominant variables, but climate research has led to an empirical equation for solubility which includes a minor dependency on salinity, attributed to Weiss, R.F.,* Carbon dioxide in water and seawater: the solubility of a non-ideal gas. *Mar. Chem., 2, (1974) 203-215. That work does not*

seem to be available online. However, a graph and the complete equation can be seen on slide 11 of Wolf-Gladrow, CO2 in Seawater: Equilibrium, Kinetics, Isotopes*, based on a 2001 book with the same title by Zeebe and Wolf-Gladrow. The slides are available on line at*

http://www.carboocean.org/Education_hp/Bergen/CO2inSeawater-06f.pdf.

[*Note 10/4/08: Lucy Skywalker reports difficulty opening the above link. Firefox returns "Not Found" by clicking on the link, however copying and pasting the link in the Firefox URL line works. In Safari, the link works both ways. In the alternative, the following works and may be more robust. Open the following index:*

http://www.carboocean.org/Education_hp/Bergen/

[*and click on the second link titled* CO2inSeawater-06f.pdf. *End Note 10/4/08.*

[*The CDIAC is always an excellent source for information on CO2, and it has a handbook online called the* Guide to Best Practices for Ocean CO2 Measurements*, Pices Special Publication 3, IOCCP Report No. 8. It has a slightly different and somewhat superior version of Weiss's equation for Henry's Constant in Chapter 5, p. 12 of 19, equation (30).*]

The data for your calculations that the Sun gives the Earth 24,000 times as much heat as all humankind?

[*RSJ: That reference in passing was to a calculation from the '70s. Since then, man's primary energy use has more than doubled, so a better figure today would be about 12,000. It's a comparison, for what it's worth, between the total solar radiation intercepted by Earth's disc, 1367.6 w/m* ^{2} *, which is equivalent to 5.22 x 10* ^{6} *Quads/per year compared now to the 2005 Primary Energy of 462.8 Quads published by the Energy Information Administration.*]

What exactly is "leaf water" and what is the source for your figures?

[*RSJ: The IPCC introduces leaf water into the climate problem as follows:*

> Higher plants acquire CO2 by diffusion through tiny pores (stomata) into leaves and thus to the sites of photosynthesis. The total amount of CO2 that dissolves in leaf water amounts to about 270 PgC/yr, i.e., more than one-third of all the CO2 in the atmosphere. This quantity is measurable because this CO2 has time to exchange oxygen atoms with the leaf water and is imprinted with the corresponding 18O "signature". Most of this CO2 diffuses out again without participating in photosynthesis. Citations omitted, TAR, §3.2.2.1

[*Thereafter, the IPCC gives leaf water little notice. It is absent from the IPCC's carbon cycle budget, but has a major influence on the residence time of carbon in the atmosphere if it is in included in the IPCC's residence time equation. The latter is found in the IPCC's glossaries, but it, too, is not mentioned in the text of its Reports.*]

How do you relate to Segalstad's citing of many papers giving an average of 12 years or so for CO2 in the atmosphere? £/div>

[*RSJ: By Segalstad, I presume you mean, "Carbon cycle modelling and the residence time of natural and anthropogenic atmospheric CO2: on the construction of the 'Greenhouse Effect Global Warming' dogma", 7/1/97. In that article, he provides a long table of multiple sources for residence time, and he concludes that they show the residence time to be "quite short, near 5 years." I wouldn't quibble with his data sources or even check is averaging. The IPCC formula yields about 2 years if leaf water is included, and 3.5 years otherwise. The formula is straight forward, and rather beyond question. It is analogous to the high school physics model for a leaky bucket.*

[*To get around its problem with the residence time, IPCC invents the concept of a "response time", which is longer apparently because of some time for its models to reach an equilibrium. Segalstad is correct that the long residence time is dogma. It is a necessary assumption, and at that not very successful, for the growth in atmospheric CO2 to have been caused by man. It is a failed link in the AGW conjecture.*]

I would hope you know about the "atmospheric pipe" effect that explains why Lance Enderbee can show that 1ºC SST rise would cause 150 ppm increase, yet the solubility laws show there would be a total of 1000-1500Gt outgassing. This would be around 600 - 800 ppm increase - IF the CO2 hung around!

[*RSJ: With some confidence, I'd say his last name is Endersbee. However, I could not find any reference associating him with an atmospheric pipe, or relating to numbers for outgassing as large as you suggest. The IPCC estimates the annual outgassing from the ocean to be about 90 Gt/year, so someone is suggesting a 10 to 15 fold increase. A 1% change in Henry's Constant at the high temperature end requires about a 17 degree change in temperature. Do you have a reference?*

[*In my model, the ocean exchange is dominated by absorption of CO2 across the surface, where currents carry the water poleward until they become loaded with CO2 in ice water. This model would not change much with changes in Sea Surface Temperature until the ice caps are gone. At the poles, the water descends into the THC (or MOC, to the IPCC), to reemerge mostly in the Eastern Equatorial Pacific to outgas at the prevailing temperature, where a one degree change would not have a huge impact. As a guess, could the model you suggest be computing outgassing over the entire ocean surface area?*]

Posted by Lucy Skywalker | September 28, 2008 5:21 AM

Ferdinand Engelbeen wrote:

0809300500

I was a little surprised to see my name mentioned in this page, seems that my work on Vostok had some merit... And I have read your comments on my work about the increase of CO2 in the atmosphere in reply to David (August 24)...

[*RSJ: Thanks for the comments. I sent you a heads-up by e-mail on 10/24/06. Perhaps the e-mail address was not correct. Your work on Vostok was instrumental in motivating me to apply systems science to the climate problem as created by IPCC. I found the curvature in your data to be significant and systemic.*]

First, as is confusing amongst warmers as good [RSJ: well?] as skeptics, one needs to understand the difference between residence time of an individual CO2 molecule (A or n) in the atmosphere and the time that is necessary to remove an excess quantity of CO2 (as mass) over the natural temperature driven dynamic equilibrium between upper oceans / vegetation and atmosphere.

[*RSJ: You seem to be distinguishing between Residence Time and Response Time, which IPCC defines in both its Third and Fourth Assessment Reports. Residence Time is the most elementary of physics from public school. On the other hand IPCC defines Response Time as a climate parameter, when it is actually a modeling parameter, set at the option of the modeler. About the best that could be said for Response Time is that it is unreliable, and in practice, subjective. Response Time is not suitable for an objective analysis.*]

The residence time of an individual molecule is reigned by the turnover of about 150 GtC/yr between oceans/vegetation and atmosphere over the seasons (and partly continuous) on a total of ca. 800 GtC in the atmosphere. This gives a half life time of any CO2 molecule of slightly over 5 years. This is what is seen in the fate of aCO2 (as 13C decrease, less than expected from fossil fuel burning) and 14C from the atmospheric nuclear tests.

[*RSJ: IPCC turnover is between 210 GtC/yr (TAR) and 214.8 (AR4). It might be 360 GtC/yr if leaf water replaces terrestrial Gross Primary Production, and 480 GtC/yr if it is in addition. IPCC just left leaf water out of the carbon cycle.*

[*For the sake of our readers and future reference, half life and residence time have a simple mathematical relationship. If q is the probability a molecule is not removed from the atmosphere in a year, then the half life of the reservoir is the logarithm of 0.5 divided by the logarithm of q. The Mean Residence Time is the reciprocal of 1-q. Thus half life is ln.5/ln(1-1/MRT). I don't have a definition of half life in terms of Response Time.*

[*IPCC relies on the 13C decrease in the atmosphere as evidence that the increase in atmospheric CO2 concentration is ACO2. This is part of what Eduard Bard called a "killing proof" that "completely rule[s] out ocean warming as the main cause" of the atmospheric CO2 increase in the last 50 years.*

[*To make its case, IPCC relies on a subjective, visual correlation created by co-plotting the record of "Global emissions" and "δ13C(CO2)" against time in Figure 2.3, AR4, p. 138. If you will notice, IPCC scaled and offset the ordinates to give the visual impression of a relationship. This technique can make any two arbitrary data records with visible trends appear related, and the IPCC's treatment of 13C is not an isolated example. All IPCC needs is a lack of scientific literacy on the part of its audience. This is unacceptable science, and a fraud. It's quite like Photoshopped missile launches.*

[*IPCC no longer relies on 14C information. Since no climate crisis would exist but for the IPCC, we need not be concerned with 14C data.*]

The increase of total CO2 in the atmosphere is of completely different order. If we should stop the emissions today, the CO2 level would decrease with about 4 GtC in the first year (on a total 200 GtC increase over the past 150 years), due to the partial pressure difference of CO2 (pCO2) between the atmosphere and the upper oceans. Next year, the pressure difference would have decreased somewhat (be it only a little at the sink place of the THC, the main sink for CO2 too). The half life time of the reduction of CO2 back to dynamic equilibrium levels is about 38 years (according to Peter Dietze). In this case there is no difference in fate between aCO2 and nCO2, as both are simply driven by the total pressure difference (except that 13C and 14C have different exchange speeds than 12C).

[*RSJ: You are, of course, referring to Henry's Law of solubility, which IPCC ignores. A stream of CO2 circles Earth between the ocean and the atmosphere which is 15 times the flux of ACO2 emissions. The evidence is strong that it mostly flows into the THC in the polar regions, where the uptake flux density area is eight times as great as that across most of the ocean. It is outgassed in the Eastern Equatorial Pacific, where the flux density is seven times as great as the median. See the Takahashi diagram, AR4, Figure 7.8, p. 523. I would not concede that this is a "little sink" or source.*

[*The 38 year figure seems unsupportable.*

[*Certainly isotopes have different exchange rates because solubility is a kinetic process, and the isoptopes have different masses. However, the differences are most likely trivial in light of the uncertainty in modeling dissolution (the solubility process). Most importantly is that IPCC has not relied on solubility, much less the fine structure of the mass dependence. It makes its case for the increase in atmospheric CO2 being all anthropogenic using stoichiometric relationships and isotopic delta ratios. IPCC has failed to show that mass balance analysis supports its model. This is a major omission.*

[*I agree that nCO2 and ACO2 should suffer the same fate to the first and second order. However, IPCC and going back to Revelle & Suess (1957), try to model the flux of ACO2 as additive with the (equilibrated) flux of nCO2. They have tried to show what amounts to a discrimination between nCO2 and ACO2, in effect, a fractionating solubility.*

[*What IPCC has done is rely on its linear model, radiative forcing, for a system it believes to be "highly nonlinear", a meaningless concept except with respect to models. Solubility is in general a nonlinear law, and IPCC needs to model the total flux of CO2 as a mix of background, natural and ACO2. A combined treatment should show that ACO2, while twice the mass of the MLO increase, is less than 10% of the mix of the increase.*]

Then the fundamental point about bookkeeping:

> *implication is unfounded, and wrong based either on physics or on logic. Taking everything at face value, the ACO2 certainly more than accounts for the atmospheric increase, but that is far from the same as being the cause of the increase. The argument is mere single point bookkeeping.*
>
> *Suppose the natural sources increased at the same time by say, 7 GtC/yr, and the natural sinks increased by 10 GtC/yr. The bookkeeping is the same, and the increase would be 50:50 natural and ACO2.*

Basicly, that the increase of CO2 in the atmosphere is human made, indeed is simple bookkeeping. If you add 9 GtC/yr and measure an increase of 5 GtC/yr, then the increase (in mass, not in individual molecules) is surely the result of the emissions. Even if one (or more) of the natural flows increased as you say, that must be compensated by an equal increase of the sinks, or you would have a total increase (in mass) of both emissions and increased natural flows. An increase of natural flows and natural sinks gives more turnover, and adds nothing (in mass, not in individual molecules) to the atmosphere.

[*RSJ: To the first order and on the basis of mass, I agree, and that is reflected in the citation you quote: "the ACO2 certainly more than accounts for the atmospheric increase". Man's emissions are diluted by outgassing that is, in part, measurably centuries to millennia old. So ACO2 is a small percentage of the mix. This is the mass balance problem the IPCC has not addressed to account for the δ13C data.*

[*Your argument requires an estimate of the global atmospheric CO2 increase. IPCC assumes and rationalizes that the increase at MLO is global. This is the essence of the well-mixed conjecture, which even IPCC reports contradict. Other models for the MLO increase have been discussed in* ***On Why CO2 Is Known Not To Have Accumulated in the Atmosphere & What Is Happening With CO2 in the Modern Era*** *on this blog.*

[*A simple model shows ACO2 emissions can account for the assumed global CO2 increase and the δ13C decrease, though only about 6% of the global mix.*

[*Your second sentence of the form A or B is true because B is true. A is false, though. An equal increase of the sinks does not follow unless you, like IPCC, have relied on the assumption that the mass of natural fluxes is in equilbrium. If the sea surface temperature is increasing, especially in the Eastern Equatorial Pacific, then a global disequilbrium exists and the sea is increasingly outgassing. I assume that the uptake at the poles remains at the temperature of ice water. Your third sentence is a conclusion from part A, and is not true.*]

As long as the increase in the atmosphere is less than the emissions, there is no ***net*** addition by natural flows. In the past 50 years, the total of natural sinks was always larger than the natural sources...

[*RSJ: Unless I misunderstand what you mean by* net*, this paragraph seems to say that the increase being less than the emissions proves that the natural flows are in equilbrium. That cannot be the case. Have you not relied on the assumption of equilbrium to prove equilibrium?*

Or to give it with a numerical example:

$$C_{sources} + C_{emissions} = C_{sinks} + dC_{air}$$

150 + 9 = 154 + 5 GtC

or if anybody thinks that the natural flows are ten times larger:

1500 + 9 = 1504 + 5 Gtc

For the total mass balance, it doesn't matter how large any individual natural flow is, or how much CO2 in total is circulating (as turnover) through the atmosphere. We know the total emissions to a reasonable accuracy (see CDIAC 1751-2005 emissions at http://cdiac.ornl.gov/ftp/ndp030/CSV-FILES/global.1751_2005.csv) and we measure the total atmospheric increase with reasonable accuracy (or if you want precision, English is not my native language). The difference between both is the net difference between the total of all natural sources and sinks together over a year...

[*RSJ: As a minimum, your model assumes again that the 5 GtC be a global measurement for the year. Your parenthetic qualification, "as turnover", is critical. Is it not another corollary to the natural flux equilibrium assumption?*

[*We may estimate the total emissions with some accuracy. However, Mauna Loa sits in the plume of the massive Eastern Equatorial Pacific outgassing, and that plume is likely to wander across MLO with the prevaiing wind while its intensity is modulated by SST increases.*

[*Your citation from CDIAC has six categories of carbon emissions, including cement production, though not deforestation which IPCC includes. Human respiration, ignored by IPCC and CDIAC, is already three times as great as cement production, and increases with population. If we follow the edict to reduce fossil fuel use, we're going to have to walk more, cycle more, and engage more oxen and horses. Human and animal labor would also be a positive feedback to reducing reliance on fossil fuels.*

[*How much emphasis should we put on perfecting the carbon story when greenhouse gases do not cause significant warming, much less CO2? The question is somewhat rhetorical because the only avenue worth pursuing is the developing debunking of the IPCC based on its own abundant errors and omissions.*

[*Your English is excellent.*]

Further, about the accuracy of the atmospheric CO2 measurements: the ten base stations, from Barrow (Arctic ocean) to the South Pole, are not calibrated against Mauna Loa, but there is a standardisation of the calibration gases to one common standard, which makes a good comparison of the stations possible. There is a small delay in NH stations CO2 increase with altitude and a larger one between NH and SH stations. All yearly averages are within 5 ppmv, most of the difference due to the NH-SH delay, caused by the ITCZ, which forms a barrier for the exchange of air masses. But the trends of all stations are quite identical (+60 ppmv in the past 50 years).

[*RSJ: For a full response to this claim, see* ***Gavin Schmidt's Response to the Acquittal of CO2 Should Sound the Death Knell for AGW***, ***RSJ*** *response to comments by Murray Duffin, 10/13/07. You will find citations from IPCC on the limitations of the network. You will find references to networks or subnetworks comprising 4, 10, 13, and 121 stations, and to the existence of vague "calibration procedures within and between monitoring networks". Keeling himself stated that MLO was the "identification" (calibration?) basis. Keeling, CD, SC Piper, RB Bacastow, M. Wahlen, TP Whorf, M. Heimann, and HA Meijer, "Exchanges of Atmospheric CO2 and 13CO2 with the Terrestrial Biosphere and Oceans from 1978 to 2000", SIO Ref. No. 01-06, rev. June, 2001, p. 7.*

[*Keeling warned that when the number of stations is "limited", they should be "remote from large local sources and sinks of CO2." Id, p. 2. Mauna Loa is not. He said that data from some stations were "constrained to agree with the global average fluxes". Id., p. 3. I agree from what I have read that IPCC performs the kind of calibration you describe, but I don't think it ends there. IPCC's comparison of various data records, such as MLO and SPO data in Figure 3.2, TAR, p. 201, and thermometer data merged with proxy data, e.g., Figure 1, TAR, SPM, p. 3, are just too pat.* Id.

[*IPCC has admitted that the nature of the CO2 at MLO is different than it is a other stations, in particular with regard to terrestrial influences and seasonal fluctuations. It has also admitted that the full network of 131 stations is too thin. Why is it too thin when the various data records merge perfectly?*

[*Assuming your argument is correct, IPCC needs to adopt it for its simplicity and drop the false and distracting δ13C analysis. As long as IPCC persists in its claim that CO2 can be the cause of global warming, it should concentrate on removing the weaknesses in its global CO2 assessment. It needs, among other things, to reveal the calibration methods freely and in full. Then, it needs to assess the extent to which MLO is influenced by nearby outgassing, modulated by the prevailing wind and global or regional temperature. Government should table IPCC claims at least until these are done.*]

About temperature and CO2 levels:

Based on ice cores, the long term influence of temperature on CO2 levels is about 8 ppmv/°C. This includes ocean temperatures, ice albedo, forest cover and ocean current changes. The short term response (based on the 1992 Pinatubo cooling and 1998 El Niño warming) is about 3 ppmv/°C (as variability around the trend, not the trend itself). Thus the increase of 1°C since the LIA has not given more than 3-8 ppmv increase of CO2. The rest of the 100 ppmv increase highly probable is from human emissions.

There are a lot more points to discuss, but these are already a few basic one's...

[*RSJ: Good. You refer to the influence of temperature on CO2 and not the reverse.*

[*Also, you point out that part of atmospheric CO2 is a positive temperature feedback. IPCC models do not mechanize that feedback, so they omit a critical part of the carbon cycle. Your list of phenomena does not include cloud albedo, which is a strong negative temperature feedback that mitigates all global temperature effects. IPCC omits cloud albedo feedback, which is a manifestation of what it admits is the largest problem with its GCMs. These omissions show that IPCC has not faithfully reproduced either the carbon cycle or the hydrological cycle.*]

Posted by Ferdinand Engelbeen | September 30, 2008 5:00 AM

Ferdinand Engelbeen wrote:

Dear Jeff,

Checked the mail of a few years ago, but didn't find yours. No problem, we are here now.

[*RSJ: Ferdinand, I forwarded a copy to your current e-mail address.*]

To clarify my point of view: I don't think that CO2 has a huge influence on temperature, for the same reasons as Philip Hoy: within the measurement error, there is no response of temperature to increasing/decreasing CO2 levels (up to 40 ppmv).

[*RSJ: The IPCC agrees with you that CO2 does not have a huge influence, so it puts a positive feedback into its models to increase water vapor. This it calls amplification.*

[*The measurement result you report has a sound basis in physics. Earth's surface temperature is regulated by the negative feedback of cloud cover, which is not simulated in the GCMs. The modelers "parameterize" cloud cover and albedo, meaning that they do not include the dynamic response to warming. The models do increase water vapor and clouds, but only as positive feedbacks to the greenhouse effect.*

[*Objective scientists would observe a natural realm and seek to model it as conditionally stable in that state. IPCC climatologists model Earth as unstable, balanced on a "tipping point", poised to fall into a state like Mars or Venus on a tiny disturbance. It's like the butterfly wing beat in chaos "theory". It's the Delicate Blue Planet world view. Nature does not work that way.*]

For the end of the Eemian (the previous warmer interglacial), see

http://www.ferdinand-engelbeen.be/klimaat/eemian.html.

For the Dome C ice core (LGM to Holocene increase), at

http://gallery.myff.org/gallery/145233/epica5.GIF

André van den Berg has made a nice graph, showing the lack of response.

The recent increase of CO2 in the atmosphere and the influence of the increase on temperature are two separate items, each of which need to be looked at with a lot of scrutiny.

As result of my own investigations (not influenced by any IPCC paper), and a lot of discussions with other skeptics [RSJ: I conclude that] while I am very skeptical about the influence of CO2 on temperature, I am pretty sure that the increase of CO2 in the past 150 years is man-made, for a lot of reasons. More about this in next comments. But first, back to basics.

It seems to me that the difference in residence time of individual CO2 molecules (as result of massive turnover) and the fate of excess CO2 (as mass) still is not understood. I will try to give an example.

Let us start with a hypothetical equilibrium of all cycles: temperatures and rain patterns are steady and CO2 emissions at warm places and absorption at cold places (as explained by the THC circulation) are steady-state with a turnover of 200 GtC/yr for 600 GtC CO2 residing in the atmosphere.

Now, a sudden outburst of CO2 from volcanoes adds 200 GtC within one year into the atmosphere. Besides that this particular CO2 is transparent green (you never know in hypothetical land), it has the same physical properties as the original transparent colorless amount of CO2 in the atmosphere and oceans.

What about the residence time?

With still 200 GtC/yr turnover, the residence time of individual CO2 molecules increased somewhat, due to the fact that the total CO2 mass in the atmosphere increased from 600 GtC to 800 GtC. Nevertheless, the green color caused by volcanic CO2 will diminish quite fast, at a rate of 200/800 per year. So far so good.

What happens to the increase of CO2 from 600 to 800 GtC? Good question. There was a dynamic equilibrium before the volcanic event. If nothing happens to that equilibrium, the excess CO2 would reside in the atmosphere until eternity, as no more CO2 is absorbed than is released by the oceans (everything else being equal).

But something will happen.

To begin with: the partial pressure of CO2 in the atmosphere changed from roughly 300 μatm to 400 μatm (real figure: 2.1 GtC/μatm).

If we may use the pressure differences between oceans and atmosphere as given by Feely, et al,

http://www.pmel.noaa.gov/pubs/outstand/feel2331/exchange.shtml

then the exchange of CO2 between oceans and atmosphere will be affected as follows:

At highest degassing places, the pCO2 of the oceans is about 750 μatm. The pCO2 of the atmosphere was 300, but increased to 400 μatm. That means that the driving force for CO2 degassing from the oceans decreased from 450 to 350 μatm difference. Or a reduction of 22% in outflow of CO2 from the hotspots in the oceans.

At highest CO2 sink places, the pCO2 of the oceans is about 150 μatm. The pCO2 of the atmosphere was 300, but increased to 400 μatm. That means that the driving force for CO2 absorption into the oceans increased from 150 to 250 μatm difference. Or an increase of 67% in outflow of CO2 from the atmosphere into the cold spots of the oceans.

All together, the old equilibrium is disturbed and now more CO2 is going into the sinks than is upwelling at the sources. How much, that depends on the average new pressure difference between oceans and atmosphere (the old average in equilibrium was zero). The current real pressure difference is roughly 7 μatm.

In the (not so) hypothetical example, the pressure difference causes a drop in atmospheric CO2 pressure/levels after one year from about 400 μatm to 397.5 μatm next year, as about 5 GtC extra is absorbed by the oceans, compared to the year before. Thus the following year, the average pressure difference between atmosphere and oceans is a lot smaller (from 7 to 4.5 microatm), thus the sink rate would decrease to 3.2 GtC, etc... But that is not true, as the pCO2 of the oceans has been reduced too, due to a continuous turnover of about 100 GtC between upper oceans and deep oceans. Anyway, the removal of the injection of extra CO2 in the atmosphere has nothing to do with the (short) residence time of individual CO2 molecules (whatever the origin), but with the simple linear dynamic process of solubility, governed by pressure differences between the oceans and atmosphere. That leads to much longer residence times of increased quantities of CO2 than can be deduced from the fate of "green" or ACO2 (be it 13C deficit or 14C injection).

[*RSJ: You have used solubility correctly: absorption proportional to pCO2, and outgassing inversely proportional to pCO2. The latter makes solubility nonlinear with respect to partial pressure. Therefore, we should not model outgassing of nCO2 and ACO2 separately and then add the results as some have done, at least without justifying a linearizing assumption.*

[*I don't follow your model with respect to pCO2 in the ocean being reduced due to the turnover with depth. I think of the ocean as having a certain DIC established in the surface waters. It would be in kinetic (solubility) equilibrium with the adjacent atmosphere (giving meaning to pCO2 in solution), but not necessarily in chemical (thermodynamic) equilibrium. As the water is carried to depth, the DIC content is locked in by pressure, where it circulates and is a reservoir for its own equilibrating and for biological reactions.*]

The difference is in the quantities: a turnover of 200 GtC/yr, against a sink rate of only 5 GtC/yr. The first gives the drop in color, the second gives the drop in quantity...

BTW, even if 200 GtC/yr circulates through the atmosphere and the green color disappears out of the atmosphere in short time, I am pretty sure that the volcanic outburst of CO2 is the sole contributor to the increased CO2 level with its long lifetime (as mass).

At

http://www.john-daly.com/carbon.htm

Peter Dietze has calculated a half life time of 38 years for excess CO2 in the atmosphere. The IPCC figures are NOT half life times, but to make it more scary, they give a total life time, which is thousands of years to remove the last quantity of measurable CO2 increase... The influence of that large tail into infinity is anyway near zero...

Some comment?

[*RSJ: IPCC provided a summary of 23 CO2 records of atmospheric CO2 concentration from 450 million years before the present to today. Twenty two of the records apply to a point in time, and one record it graphs as a continuous record covering the past 62 million years. It is Figure 3.2(f), and can be seen at*

http://www.grida.no/CLIMATE/IPCC_TAR/WG1/fig3-2.htm

[*The caption says,*

> (f) Geochemically inferred CO2 concentrations: coloured bars represent different published studies cited by Berner (1997). The data from Pearson and Palmer (2000) are shown by a black line. ([million years] BP = before present.)

[*One of these 23 records is quite similar to the modern, post industrial era. It is from about 350 Myr BP. In all the others, the concentration of atmospheric CO2 far exceeded the present, five times it was 15 to 20 times as great as now.*

[*Why? What caused the CO2 to have been regularly far greater than the present? What processes caused that to happen? Where did the CO2 go, and where did it come from?*

[*A science model must account for all the data in its domain. The state of the art climate models cannot do that, so they cannot be validated. One way the problem might be solved is to find an objective constraint that would limit the domain of the current models, but no such constraint is known.*

[*Other unknown processes not in our GCMs have been affecting the atmospheric CO2 concentration, and we cannot rule out that such processes are on going now to affect what we have been able to measure and estimate.*

[*We live in a most benign era. Temperatures are comfortable, and CO2 is strangely quite low, and the rates of change have been slight for the most part of a few millennia. This stability likely caused life to evolve into specialized and remarkably non-robust forms. Today's climate models are designed to support this benign environment and to extract small changes in large signals. Many things known are not in the IPCC models, and other things unknown are in no one's model.*

[*Nevertheless, in the context of the IPCC generation of models, man's CO2 emissions should increase the concentration of atmospheric CO2. And, it may be permanent. However, that the volume increase in atmospheric CO2 is greater does not mean that the increase is all ACO2, or that the residence time as defined by the IPCC is approaching some large number.*

[*In that same context and as said before, the estimated current increase in atmospheric CO2 and the decrease in δ13C can be reproduced with reasonable values for fluxes and ACO2 emissions. However, those are sufficient conditions, not necessary conditions. If other processes are on-going, such as global warming causing increases in outgassing, this state, too, can be reproduced with another set of reasonable parameter values.*

[*What scientific models must do as hypotheses is to predict something non-trivial. That has not yet happened with respect to the carbon cycle. The models must produce a novel, necessary condition that can be tested. A sufficient condition won't do.*

[*IPCC discusses the multi-time constant carbon model in prose in AR4, Chapter 7, p. 501, p. 514, p. 515, and p. 531. It quantifies this conjecture with a formula in Chapter 2, Table 2.14, fn. a, p. 213. It is the algebraic sum of three decaying exponentials plus a constant term. By this formula, 25.9% of a "slug" of CO2 is never removed. Of the remainder, 18.6% is subject to removal with a time constant of 1.186 years, 33.8% at 18.51 yrs, and the remaining 25.9% at 172.9 yrs.*

[*This model provides four fates for CO2, one being permanent storage, and the others different exponential sequestration processes. However, the model implies that a pre-process exists by which the slug of CO2 might be partitioned into four channels or reservoirs, one for each process. IPCC postulates no such process, but simply represents it in its equation. In the ocean as it appears to exist, the process which is removing CO2 with a time constant of 1.186 years will greedily consume all the CO2 nominally destined for the slower processes.*

[*Alternatively, each of the four processes might be time or capacity limited. In this way each process would stop as if its peculiar reservoir had been depleted. This implies that the processes have memory, or perhaps that CO2 added to the system has a time code so that the processes can operate differently on fresh CO2 than they do on old CO2. These are all whimsical concepts. IPCC has not thought through its multi-time constant, quick then slow, CO2 absorption model.*

[*IPCC postulates that the Revelle Factor buffers against absorption of new CO2. It claims that the bulge the Revelle Factor produces bears the signature of light weight ACO2, and that this is corroborated by the depletion of atmospheric O2 according to stoichiometric relations. The multi-time constant model appears to be an attempt to rationalize the Revelle Factor effect, or it may be an adjunct to it.*

[*The bulge exists because it is inferred from the MLO measurements, corroborated by other suitably calibrated stations. In state-of-the-art climate models, the bulge exists because ACO2 is added to the system with no competing processes. The IPCC does not include Henry's Law. And no one has postulated processes to account for the ancient history of massive additions and subtractions of CO2, or objectively to exclude the past and those mysterious processes.*

[*Trying to perfect the carbon cycle model is rather an academic exercise. The first order of business should be fixing the hydrological cycle because of the high closed loop gain of cloud albedo to mitigate any temperature changes. As you noted at the outset, the experimental response to adding 40 ppmv of CO2 is lost in the noise. We should recognize not that we have developed a valid alternative theory to the IPCC, but that the IPCC claims are premature and false alarms.*]

Posted by Ferdinand Engelbeen | October 1, 2008 2:33 AM

Ferdinand Engelbeen wrote:

Jeff, here follows some more clarification on one of your remarks:

> *IPCC relies on the 13C decrease in the atmosphere as evidence that the increase in atmospheric CO2 concentration is ACO2. This is part of what Eduard Bard called a "killing proof" that "completely rule[s] out ocean warming as the main cause" of the atmospheric CO2 increase in the last 50 years.*

Well, the IPCC (in this case) is completely right. As an introduction on what the δ13C levels are for different stuff on this world, see the web page of Anton Uriarte Cantolla:

http://homepage.mac.com/uriarte/carbon13.html

Deep ocean water has a δ13C value of near zero (0 to +1), surface ocean water a δ13C value of +1 to +4, due to organic growth (which uses 12C preferentially). Air is at -8 and falling. The decrease of δ13C thus can't be from the (deep) oceans, or the δ13C would increase, not decrease...

There are only two main carbon sources with highly depleted δ13C in the world: living organics and dead organics. All the rest (ocean CO2/bicarbonate, lime deposits, volcanic degassing, ...) is around zero δ13C. Vegetation growth enriches the atmosphere with 13C (and oxygen), while vegetation decay gives the opposite. But as the oxygen level reduces slightly less than what is expected from fossil fuel burning, that points to more vegetation growth than decay. Thus neither vegetation nor the oceans are the source of the bulk of extra CO2 in the atmosphere...

There is nothing wrong with the δ13C data from different stations, and the link between δ13C decrease and fossil fuel burning is quite strong.

[*RSJ: IPCC says of its δ13C analysis,*

> Thus, when CO2 from fossil fuel combustion enters the atmosphere, the 13C/12C isotopic ratio in atmospheric CO2 decreases at a predictable rate **consistent with emissions** of CO2 from fossil origin. Note that changes in the 13C/12C ratio of atmospheric CO2 are also caused by other sources and sinks, but the changing isotopic signal due to CO2 from fossil fuel combustion **can be resolved** from the other components. These changes can easily be measured using modern isotope ratio mass spectrometry, which has the capability of measuring 13C/12C in atmospheric CO2 to better than 1 part in 10^5 5 . Data presented in Figure 2.3 for the 13C/12C ratio of atmospheric CO2 at Mauna Loa show a decreasing ratio, **consistent with trends** in both fossil fuel CO2 emissions and atmospheric CO2 mixing ratios. Citations deleted, bold added, AR4, ¶2.3.1, *Atmospheric Carbon Dioxide*, p. 140.
>
> http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_Ch02.pdf

[*IPCC errs several ways on this issue. It fails to make the mass balance computations to support its claim of a "predictable rate", that emissions and trends are "consistent", or to resolve fossil fuel combustion from other sources and sinks. By contrast, it throws out a number for accuracy, which is useless without the applicable measurements!*

[*It should set up a hypothesis that the estimated increases in emissions cause the measured decrease in δ13C. Then by quantifying these items in their various forms and establishing a criterion, it should accept or reject the hypothesis, or simply compute a probability that the emissions caused the decrease. It needs to put a number to whatever you mean by "quite strong".*

[*The phrase "consistent with" is subjective. Instead, IPCC should have computed the correlation between emissions and δ13C in its Figure 2.3(b) to support its cause and effect model.*

[*Similarly, IPCC should have computed all four correlations implicit its Figure 2.3(a) comparing the CO2 mixing ratio at MLO and Baring Head with the O2 flask measurements at Alert and Cape Grim. Also, as stated here previously, IPCC should reveal the calibrations by which it made the pairs of measurements coincident.*

[*IPCC presented a vector diagram depicting its model for O2 consumption during fossil fuel combustion. It is TAR, Figure 3.4, p. 206.*

http://www.grida.no/CLIMATE/IPCC_TAR/wg1/fig3-4.htm

[*The diagram showed how the O2 balanced the fossil fuel combustion stoichiometrically. It did not include the chart in AR4. However, the TAR O2 consumption numbers were quite different from those in AR4. {Rev 11/11/09} In TAR Figure 3.4, O2 concentration drops almost linearly about 27 ppm between 1990 and 2000. In AR4, Figure 2.3(a), it drops on average about 250 ppm. {End rev 11/11/09.} In place of the vectors, IPCC simply provided a graphic alleged to show consistency between the records.*

[*So far, these observations reveal perhaps no more than inadequate report writing. IPCC went further.*

[*IPCC graphed the CO2/O2 chart and the ACO2 emissions/δ13C chart each with two ordinates and a single time abscissa. In both cases, IPCC offset and scaled one ordinate with respect to the other to give the false appearance that the records were "consistent". It managed to show no more than the fact that in each case records plotted against the left and those plotted against the right had trends.*

[*Nothing is wrong with co-plotting, and in the process scaling and offsetting, as long as the intent is legibility, to fit the records on the graph, or to separate them. These were not the IPCC's intent. It intended to establish that the CO2 changes were manmade by making the records parallel.*

> Later observations of **parallel trends** in the atmospheric abundances of the 13CO2 isotope and molecular oxygen (O2) **uniquely identified this rise in CO2 with fossil fuel burning**. (Sections 2.3, 7.1 and 7.3). Citations deleted, bold added, AR4, ¶1.3.1, p. 100.

[*IPCC provides the O2-CO2 records in AR4, Figure 2.3(a), p. 138, and the global emissions and δ13C records in Figure 2.3(b). They were not "parallel". Parallelism is not some kind of general scientific criterion. IPCC is telling us that this phony graphical technique was the best it had to offer to make its case.*

[*Your data relating to ACO2 being lighter is neither relevant, disputed, nor decisive. The question was whether it was appropriately lighter considering the relative volume to account for the measurements. What the IPCC needed to do was to quantify as exactly as possible what the weight of ACO2, background CO2, and other sources and sinks are, and then show that they were mixed in the correct proportion for its hypothesis.*

[*Your comment that "the IPCC (in this case) is completely right" appears contradicted by the evidence. Instead, I'm surprised that you weren't incensed by IPCC's graphical shenanigans, and its reliance upon the results it obtained. The technique is only slightly less offensive than actually altering data. It altered the appearance of the data to fool the naive reader. This is scandalous. In a scientific document intended to influence public policy or garner grants, these actions by the IPCC are unehtical.*]

Posted by Ferdinand Engelbeen | October 1, 2008 10:56 AM

Ferdinand Engelbeen wrote:

> Jeff,
>
> Wow, what a reaction! To begin with, I have done the calculations (you can do them yourself if you wish), which the IPCC has supposedly done too (but didn't publish). As already said, I don't rely on any published IPCC paper, but had a look at the original data and correlations.

[*RSJ: My apologies for my curt or acerbic responses. My excuse is that I have no tolerance for the poison of faux science mixed with government.*]

> The δ13C data of the different stations can be found at
>
> http://cdiac.ornl.gov/trends/co2/contents.htm
>
> The correlation between accumulated emissions in the period 1981-2002 and the δ13C trend (Mauna Loa, but any of the other stations gives similar results) is -0.98, R^2 = 0.965. In this case the causation is quite clear, there is no other source of low δ13C in play...

[*RSJ: Your correlation number, R^2 = 0.965, is extraordinarily large, especially in the field of climate. I immediately suspected that you were measuring the correlation between records that had not been de-trended. That suspicion is reinforced by your statement that you measured the correlation of a record with a trend. Two completely unrelated records will show a correlation if they both simply have a non-zero trend line. You need to de-trend the records, and then measure the correlation.*

[*Measuring the correlation of data not de-trended is quite analogous to the graphical technique employed by IPCC. High correlation of such records says a lot about the signal-to-noise ratio, or the ratio of its first order signal to its higher order components, than it says about a possible cause and effect. Such techniques are worse than poor science in publications like IPCC Reports.*

[*I certainly agree with your last sentence above. But the lack of another low δ13C in play is a conjecture, and a result of our lack of understanding of the record in geological time. The δ13C problem should be framed as a hypothesis or prediction, and tested. The way to do that is to complete the mass balance equations of the model for the mixing of ACO2 and background CO2, and assess the resulting δ13C against the measurements. If we get the right value within measurement errors, then we have not proof, but confirming evidence for the model. That would be quite a significant achievement.*

[*If the test shows that the measured decrease in δ13C is too rapid, then we have evidence of another, unknown source of light CO2, or an error in our weight assumptions. If the measured decrease is too slow, then we may have a source of very heavy CO2 being emitted, or again an error in weight assumptions. A world of scientific discovery awaits a scientist. The modeling work has been left undone.*]

I have the impression that you look too much to not very relevant details to throw away inconvenient conclusions.

[*RSJ: To the contrary, it seems to me that claiming that ACO2 is the only source for light CO2, coupled with the background getting lighter, to conclude that the alleged bulge in atmospheric CO2 is manmade is a highly convenient conclusion. It is a conclusion I cannot yet accept because the most basic exercise of the model remains undone.*

[*We differ in that I want to look at nothing but what IPCC has done. Science in its own good time will work out the wrinkles in models. Government will cast them in stone.*]

The graph that the IPCC shows about the δ13C decrease is at the scale of the decrease during the period of the measurements. The same for the emissions increase (they should have used cumulative emissions btw). δ13C levels in the atmosphere never have been near zero (the pre-industrial value was around -6.4, decreasing since then in ratio with the emissions), thus scaling from zero has no relevancy at all. And both are surely connected, as the emissions have a very low δ13C compared to the atmosphere and the oceans.

[*RSJ: The IPCC's right hand scale for δ13C runs from -7.6 to -8.1, and as you say spans the measurements of the period quite well. Likewise, the scale for ACO2 runs from 4 to 8 on the left, and spans the measurements. Those ranges and spans are not the problem. IPCC ran the ACO2 scale from the bottom of the graph to the top. (The zero point is uninteresting.) The problem is that IPCC scaled δ13C scale to span only 55% of the full scale available. It reversed the sign (OK in itself) and adjusted the scale to give the false and improper sense that the signals are correlated, and hence that a cause and effect is probable.*

[*Good point that the emissions should have been cumulative! It's an excellent point contrasted with the fact that I missed it altogether. It's more evidence of what can only be called IPCC incompetence and fraud.*

[*The signals involved here may indeed prove to be well-correlated. But why try to rescue the IPCC from its errors, especially errors which have no bearing on the ultimate question of the nature of the climate and man's influence on it? IPCC has committed far greater errors, e.g., omitting the positive feedback of outgassing and omitting the negative feedack of cloud albedo.*]

The same remark about the language the IPCC uses: They use the words "consistent with trends/emissions" as caution, simply because the relation between emissions and δ13C decrease needs calculation of all factors which are involved:

a. the influence of vegetation decay and production (13C increase, as long as more oxygen is produced than used).

b. the influence of the seasonal exchanges with the oceans: as what is released from the oceans has a higher δ13C (0 to +4 per mille) than what is absorbed from the atmosphere (at about -8 per mille), the decrease in δ13C caused by the emissions (at -24 per mille) is diluted (it is in fact even more complicated, as fractionation is involved too).

[*RSJ: Good points. In addition, the seasonal changes at MLO Keeling eventually attributed to the ocean need modeling. The question then arises what are the seasonal fluctuations in δ13C? Still, the points we raise are second order effects. The missing first order effect is the dilution of atmospheric δ13C according to the mass balance estimates.*]

Thus when they use caution, that doesn't change the fact that the decrease of δ13C shows that the oceans are not the cause of the increase of CO2 in the atmosphere (neither is vegetation in the past decade)...

[*RSJ: What you claim is far from fact. IPCC hasn't even established with any kind of rigor that the increase at MLO is representative of the atmosphere. It contradicts its own well-mixed hypothesis, which would have been helpful to its claim. It uses secret calibrations to bring records into accord with MLO data. IPCC claims that the seasonal effects at MLO are due to terrestrial biology, a point at one time claimed by Keeling and later reversed. IPCC has taken no notice of the outgassing just upwind of MLO and its plume. The list is long and varied.*

[*And a fatal flaw in IPCC climate modeling is that it cannot account for the extraordinary high CO2 estimates in the distant past. Its carbon cycle model is far from complete. Other CO2 processes, sources, or sinks must have been present in the past, and cannot be blindly dismissed today.*]

I do agree with you that it is very annoying that many references to the literature are for a pay per view. It did cost me already hundreds of euro's (and a subscription to Science on line), to see the original articles. But that shouldn't lead to the conclusion that such references are worthless...

[*RSJ: I estimated that completing a library of for IPCC references would cost many tens of thousands of dollars. Unfortunately there is no way to determine beforehand which purchases might actually be useful. Many IPCC references are indeed worthless or duplicative. Too many of them are no more than professional stroking, that is, mentioning every honored scientist that has gone before or who might sit on a peer-review panel.*

[*What's worse is the lack of respect for protocol in scientific writing. A report should not require research to discover facts and models on which the report relies. At some level, a report should stirve to be self-sufficient for its intended audience. The bibliography should mostly be for the purpose of fact checking.*]

Posted by Ferdinand Engelbeen | October 2, 2008 12:58 PM

Lucy Skywalker wrote:

Thank your for replying at length, as always. I don't know how you manage but thanks. The link to the saline solubility info did not work and I could not find it on the site though I looked. I would be grateful if you could check if it was correct.

[*RSJ: Thanks for the feedback. The link is indeed unreliable. See the notes and instructions inserted with the previous reference.*]

The single issue I want to explore further is the one I missed giving you the URL, sorry! - J Floor Anthoni's interesting website, CO2 solubility curve here http://www.seafriends.org.nz/issues/global/acid.htm and the "atmospheric pipe" effect and Endersbee's graph here http://www.seafriends.org.nz/issues/global/acid2.htm#carbon_situation (just scroll down a little). I read both Endersbee's graph and Anthoni's solubility graph, to estimate the dCO2 / dTemp - both as MEASURED (Endersbee certainly fits the Keeling record) and as CALCULATED from the solubility properties. Though Anthoni may have the wrong solubility figures and the wrong volume of water to use to calculate outgassing from solubility, I feel he is on to something important with the "atmospheric pipe" effect. Perhaps we need to complete this with another "effect" namely a "Sea as Area not Volume" effect to deal with the true quantity of CO2 expelled by a "Sea SURFACE Temp" increase of 1ºC.

[*RSJ: Anthoni asks,*

> Reservoir or pipe?
>
> Atmospheric scientists treat the atmosphere as a reservoir, with inputs and outputs, much the way bean-counters treat a company balance sheet. But is it a correct model?

http://www.seafriends.org.nz/issues/global/acid2.htm#pipe

[*In science, models are neither correct nor incorrect. A simulation need not emulate reality. Models are successful or not according to their predictive power, and that depends only on their outputs. IPCC uses both a reservoir model and a pipe model at one time. IPCC's reservoir model is shown in several places. See for example AR4 Figure 7.3, p. 515 at*

http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_Ch07.pdf.

[*The pipe model is evident from the CO2 slug response equation shown in footnote (a) of AR4 Table 2.14, p. 213 at*

http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_Ch02.pdf

[*This equation represents 100% of the CO2 being divided into four processes with four separate rates of sequestration, one being infinite. None of these four sequestering processes has access to the CO2 designated for the other three, hence the model represents piping.*

[*If a modeler pursues a simulation by emulating the real world, but omits a major physical phenomenon, his model is subject to criticism. Then, absent a transcending, successful, non-trivial prediction, science would regard such a model as invalid. That applies to the IPCC climate model, which model temperature feedbacks except for the dominant negative feedback, cloud albedo.*

[*Anthoni's solubility curve in grams per liter is an excellent fit to a 36 point solubility table for CO2 in water from the Handbook of Chemistry and Physics in 1953, converted from grams per 100 grams. In later years, the publisher shortened the table to five points and changed the coordinate system to mole fraction (moles of solute to moles of solvent). Henry's constant given by Zeebe and Wolf-Gladrow 2001, attributed to Weiss (1974), is solubility in moles per kilogram per atmosphere. The original HC&P shows less solubility than the Weiss equation at high temperatures, generally above 40ºC, outside the range of the ZW-G graph, and not very significant to climate. The HC&P data is a best fit to the Weiss equation at about zero salinity (-3.3 with a free intercept and 6.2 with a zero intercept).*]

I would like to invite people interested, to join in a "internet laboratory workshop" to share and develop insights on this interesting issue and other related issues of CO2 and oceans where crucial to understanding warming and outgassing. I set up a forum thread at http://www.greenworldtrust.org.uk/Forum/phpBB2/viewtopic.php?t=69&sid=2627da3c7f31aaac1886448aadbe3cf5 which links to a "workshop" page http://www.greenworldtrust.org.uk/Science/CO2-flux.htm . I've put your solubility graph alongside Anthoni's as I do not know which one is correct or what the sources are for either one.

[*RSJ: The solubility graph you credit to me is from a source on which IPCC relies for finding that "Chemical buffering of anthropogenic CO2 is the quantitatively most important oceanic process acting as a carbon sink." AR4, ¶7.3.4.2, p. 531. That source is Zeebe and Wolf-Gladrow, 2001, as reproduced in the problem link in the **RSJ** response to your 9/28/08 post.*

[*The sole question to be answered in the current climate crisis is whether the IPCC model could be validated, much less whether it is valid. The success of Anthoni's model is irrelevant to the debunking of the IPCC effort. IPCC predicts a catastrophe from ACO2, whether it models with pipes or reservoirs. If some other model predicts no catastrophe, we have a second opinion and an argument in which resolution would occur post-catastrophe. Meanwhile, atmospheric pipes do not debunk the IPCC GCMs, and that is the workable task at hand.*]

Posted by Lucy Skywalker | October 3, 2008 12:30 PM

Ferdinand Engelbeen wrote:

> *RSJ: Your correlation number, R^2 = 0.965, is extraordinarily large, especially in the field of climate. I immediately suspected that you were measuring the correlation between records that had not been de-trended. That suspicion is reinforced by your statement that you measured the correlation of a record with a trend. Two completely unrelated records will show a correlation if they both simply have a non-zero trend line. You need to de-trend the records, and then measure the correlation.*

May I disagree here? Of course you are right that when there are similar trends in unrelated variables, you will always see a (spurious) correlation. But if you detrend in this case, you remove the correlation of cause and effect too: without addition of ACO2, you will not see any (negative) effect on δ13C (except from the differences over the seasonal exchanges)...

[*RSJ: The trends don't even have to be similar, just not zero to register a false correlation.*

[*The records of ACO2 emissions and δ13C should be rather typical in that each should have a fine structure to the signal, meaning that it does not follow a perfect trend line, plus additive noise components due to measurement or system errors. That fine structure is a part of the cause and effect model, and is what contributes to a meaningful correlation. So always de-trend, and then measure correlation.*]

The same logic was used initially by MacRae: he detrended the monthly (MLO) CO2 series and compared that with the satellite temperature data. There was a good correlation between them (the effect is about 3 ppmv/°C), but integrating the series showed an increase of a few ppmv, while in the same time period the real increase was 60 ppmv, removed by detrending. Thus the correlation was only about the variability in CO2 increase around the trend, not the increase itself.

[*RSJ: Without a reference for MacRae, I was at a disadvantage. I didn't follow your meaning with regard to "integrating the series". By this do you mean restoring the trend line?*

[*Regardless, when detrending, don't throw away the detrended part. It is a major component of the signal, just not any part of the correlation. Also, the detrended part while usually contemplated to be the zero and first order best fit terms, can also include higher order terms according to any arbitrary function one might wish.*]

The full trend and the accumulated emissions show an extremely good correlation (over 100 years) R^2=0.996. Indeed that is impossible (as well as for the δ13C decrease) for a natural process. In fact it proves that this is man-made, and that the whole CO2 equilibrium reacts as a simple first order process on the disturbance by an extra CO2 injection in the process...

[*RSJ: Did you mean improbable instead of impossible? How does the high correlation prove that the CO2 is man-made? Where did you find a CO2 equilibrium? Are you referring to equilibrium with respect to the well-mixed conjecture? A nearly instantaneous CO2 equilibration occurs across the surface of the ocean, but that is the kinetics of dissolution and only indirectly relevant to the CO2 concentration to δ13C process.*]

The seasonal changes in δ13C and oxygen are related to vegetation growth (spring to fall) and decay (all year, including fall to spring), while seasonal CO2 level variations are related to vegetation growth and decay, and ocean temperatures. If temperatures (and rainfall) stay even, the detrended monthly variations stay near zero.

[*RSJ: IPCC says the record of the isotopic ratio has changed in a way that can be attributed to fossil fuels. 4AR, FAQ 7.1, p. 512. This was because the graphs, which it doctored to be parallel, were parallel. AR4, Fig. 2.3, p. 138. It also said, in agreement with you, that CO2 at MLO was modulated by seasonal changes in the biosphere. AR4, ¶2.3.1, p. 138.*

[*The seasonal variations in δ13C are about 0.3 per mil, peak to peak, around a nominal value of about 7.8 per mil. The entire range of δ13C in IPCC Figure 2.3 is 0.5 per mil for 22 years, so the seasonal variations would have been quite obvious and would have obscured the parallelism IPCC wanted to portray. Consequently, IPCC converted monthly data to annual averages, removing the seasonal component altogether. It says,*

> Annual averages of the 13C/12C ratio measured in atmospheric CO2 at Mauna Loa from 1981 to 2002 (red) are also shown (Keeling et al, 2005). [Keeling, C.D., A.F. Bollenbacher, and T.P. Whorf, 2005: Monthly atmospheric 13C/12C isotopic ratios for 10 SIO stations. In: Trends: A Compendium of Data on Global Change. Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, TN.]

http://cdiac.ornl.gov/trends/co2/iso-sio/iso-sio.html

[*So IPCC makes its case for Anthropogenic Global Warming by removing the seasonal fluctuations of δ13C. Since seasonal data are available from the IPCC source, they could be used to contradict its argument. That counter argument does not appear to have been discovered. Instead, we have Keeling's own writings.*

[*At one time, Keeling said that the MLO record contained seasonal changes due to the activity of land plants. Keeling, C. D.,* The Concentration and Isotopic Abundances of Carbon Dioxide in the Atmosphere*, Tellus, Vol. XII, No. 2, (1960), pp. 202-203. However 36 years later, and before even the TAR, Keeling said,*

> At several northerly sites including BRW [Point Barrow, Alaska] and LJO [La Jolla, California], isotopic changes in seasonal amplitude appear to track the CO2 amplitude changes quite well over periods of several years, suggesting that a dominant

> component in the seasonal signal of CO2 is terrestrial plant activity. At other sites such as MLO in Hawaii, differences between trends in 13δ and CO2 concentration suggest an oceanic component. Whorf, T.P., C. D. Keeling, & M. Wahlen, *A Comparison of CO2 and 13/12C Seasonal Amplitudes in the Northern Hemisphere*, Results, September, 1996, p. 9.

[*Keeling didn't say the MLO record contained an oceanic component **in addition** to the terrestrial. By contrasting the MLO record with those from the other sites, he implies that it contained an ocean component **instead** of a land component. He appears to be revising his previous conclusion.*

[*These contradictory opinions and evidence show that the CO2 content is not especially well mixed. They contradict that the seasonal component in MLO records are due to terrestrial processes, leaving that conjecture without supporting evidence.*]

Trends in δ13C and O2 were used by Battle, et al. to estimate the partitioning of absorption of CO2 between land and oceans, see http://www.sciencemag.org/cgi/reprint/287/5462/2467.pdf (but, as you know, for subscribers...). It contains the seasonal variations of CO2, O2 and δ13C.

[*RSJ: This report is available online as part of a limited free access opportunity. It contains a graph of global average δ13C from 1991 to 1998, which shows the seasonal fluctuations IPCC removed. The data can also be seen and downloaded from*

http://cdiac.ornl.gov/trends/co2/iso-sio/iso-sio.html

Again, the decrease of δ13C shows that the oceans (and vegetation, from the oxygen measurements) can't be the source of any extra CO2 in the atmosphere. That has nothing to do with what is measured as increase at Mauna Loa. It is simply because even 1 GtC/yr extra from the (deep) oceans would increase the δ13C level of the atmosphere (if nothing was emitted by humans), while we see a decrease.

[*RSJ: Most of the substantial outgassing from the ocean appears to come from the venting of the THC, which contains CO2 from the atmosphere as it existed several hundred to a few thousand years ago. No evidence exists that this outgassing is any different than it was immediately before the industrial era.*]

As far as I can see, the data from the ten stations + flights above the inversion layer confirm that the atmosphere is pretty well mixed horizontally in a few days to a few weeks, and vertically in a few weeks to a few months. Only the ITCZ [InterTropical Convergence Zone] separates the two hemispheres to a large extent... Outliers due to local disturbances are not used for averages, but still available and don't influence the trends.

[*RSJ: IPCC says,*

> East-west gradients of atmospheric CO2 concentration are an order of magnitude smaller than north-south gradients. TAR, Ch. 3, *The Carbon Cycle and Atmospheric Carbon Dioxide*, Exec.Sum., p. 185.

[*Consequently EW CO2 gradients must be detectable, and NS gradients ten times greater. That doesn't sound well-mixed. Someday we should be able to image the CO2 in the atmosphere to see CO2 starting from the Eastern Equatorial Pacific and winding its way toward the poles in twin spirals, rather like we see on the gaseous planets.*]

The high estimates from Beck's historical data are near all based on measurements at places with huge local sources and/or sinks, with diurnal and day by day variations of over hundred ppmv. There are no series longer than a few years and many are one day to a few days values.

His trend of averages is as scientific as averaging the temperature record (in the middle of the towns) of Oslo during a few years, adding to the trend the next few years from Rome and again Oslo to finish. No wonder you see that the middle of the trend peaks up...

[*RSJ: This may be a reference to Beck, E-G, "180 Years of Atmospheric CO2 Gas Analysis by Chemical Methods." For a lengthy discussion and a link, see* **Gavin Schmidt's Response to the Acquittal of CO2 Should Sound the Death Knell for AGW***, response to sunsettommy, 11/26/07. Simply Google for Beck at rocketscientistsjournal.com.*]

Posted by Ferdinand Engelbeen | October 3, 2008 2:27 PM

Ferdinand Engelbeen wrote:

Jeff,

Pieter Tans, responsible for the Mauna Loa data, has made a presentation about the influence of fossil fuel burning on δ13C levels and the increase of CO2 in the atmosphere. See:

http://esrl.noaa.gov/gmd/co2conference/pdfs/tans.pdf

Except for the decay rate of excess CO2, I do agree with his conclusions...

[*RSJ: Tans' presentation entitled* "Today's carbon cycle as revealed by observed CO2 records" *consists of 23 slides in two sets. First, titled "Decadal Mass Balance of Carbon", contains eight charts followed by a slide saying,*

> Conclusion:

The observed increase in atmospheric carbon dioxide since pre-industrial times is entirely due to human activities.

[*The second set, titled "CO2 Growth Rate and Climate Anomalies", consists of 12 charts and a concluding text chart saying,*

Conclusion:

2/3 of the interannual variance of the CO2 growth rate is explained by the delayed response of the terrestrial biosphere to interannual variations of temperature and precipitation.

[*Some of these charts bear the dates of 1986 and 1987. Most are undated, though several have data to about 2007. Many of the charts have no legend, and odd traces that are undecipherable. The charts have no accompanying text except for two concluding charts.*

[*Tans first chart, "CO2 trend at Mauna Loa Observatory" contains two unlabeled curves.*

[*Tans second chart, "excess atmospheric CO2" from 1987 contains two unlabeled curves. At the bottom, it has an equation called "Pulse response", which reads*

$$[CO2_{ATM} = 0.131 + 0.201 \exp(-t/363) + 0.321 \exp(-t/74) + 0.249 \exp(-t/17) + 0.098 \exp(-t/1.9)$$

[*The equation lies close to the two unlabeled curves, except that the equation is normalized to 1. By overlaying the curves and a graph of the equation shows that the denominators in the exponents are in years. The equation is the same form as IPCC's equation given in footnote a of AR4, Table 2.14, p. 213. This is a physically realizable equation for five oceanic CO2 sequestering processes where each process is served by its own separate pipe. Regardless of how well it might fit the ocean, it is not an emulation of the real world. In the ocean the fastest sequestering process will exhaust every reservoir. See discussion in response to Ferdinand Engelbeen on October 1, 2008, above.*

[*Slide 3 is "atmospheric carbon dioxide history" with an unlabeled curve, plus a set of unlabeled data points with a curve fit to them. It is quite similar to TAR Figure 3.2b), in which Mauna Loa CO2 measurements are graphed to fit ice core measurements precisely.*

[*Skipping ahead, Slide 7 is "13C/12C isotopic ratio of CO2". It contains a series of 22 data points with a curve apparently fit to them plus two remote short traces, one lying approximately in the '80s and the other from the late '90s to early 2000s. A reader might suppose that the lines are part of the same physical process, a continuum from 1750 to the present showing an accelerating lightening of atmospheric CO2. This approach has merit, and might lead to a scientific analysis to find one expression for the relationship. Some of the data were not used anywhere by IPCC.*

[*Slide 8 is "rate of CO2 injection into the atmosphere". This is the penultimate chart of the first set and appears to establish the conclusion. It relies on a visual similarity between the rate of fossil fuel emissions and the 5 year smoothed estimated rate of increase in presumably atmospheric CO2. The graphs should be reconstructed in cumulative CO2, in units of mass as needed for determining mass balance, and not mass rates. Then the trend lines should be extracted for each to see if they ultimately coincide. In addition, the two traces should be detrended and a cross-correlation function calculated to see if the two traces are correlated, and if so, whether the lead-lag relationship suits the model.*

[*The conclusion that the increase is due to human activities cannot be ruled out, but it is not supported by the data or implied analysis.*

[*The second set of charts are highly problematic. Slides compare rates with rates and temperature anomalies with simulated CO2 growth rates. Unlabeled curves show responses to global temperature and precipitation anomalies in time. These are unfathomable without text and labels. The conclusion about the variance in CO2 growth rate can not be drawn from the slides without more.*

[*Moreover, the ultimate conclusion about the growth rate of CO2 and the terrestrial biosphere is not credible without an analysis of the oceanic processes involved.*

[(Edited 12/4/08.) *The carbon cycle model implied by these charts needs to be compared to the CO2 record over geological time inferred from proxy data. As it stands, the model appears to have no capacity to represent those data. It is an unquantified, problematic fit to near term data, and little more than a curiosity. It does not support or for the most part even connect to the IPCC analysis and model.*]

Posted by Ferdinand Engelbeen | October 4, 2008 11:05 AM

Lucy Skywalker wrote:

Thank you for your help. I've now had time to take in a bit more of your good work. I didn't mean to imply screeds are bad, just it's a huge amount, to someone who doesn't know moles and basic statistics - when, as you say rightly, we need to focus on the key issues to reclaim Climate Science from the IPCC science-lookalikes.

Please note: in "The other straight-line fit" you say "The product of the two slopes is the mathematical "coefficient of determination", conventionally labeled r^2, with r being the "correlation coefficient"". Now surely r and r^2 are dimensionless, and one gets dimensionlessness near-unity not by the product of the two slopes but by their ratio?? or have I misunderstood?

[*RSJ: You have a scatter of data to which you make a least squares error fit of the y data to the x data. That gives you a line that dimensionally is y-units/x-units. Now reverse the process, looking to estimate or predict x in terms of y. This line dimensionally is x-units/y-units. The two lines intersect at the (x-average,y-average). The product of the slopes is dimensionless. We don't usually speak of*

the angle between the lines because that angle depends entirely on the scaling of the coordinates. But if the lines are coincident, then the product of the slopes is unity, and otherwise is less than one.]

Now to Floor Anthoni's "atmospheric pipe" and the relevance to reclaiming good science. I agree with you totally in principle about sticking to the essentials. But it seems to me that essentials sometimes need reinforcing with clarity and good details round the edges... I feel people need to grasp comfortably what actually *happens* to manmade CO2, to help let go the crazy science. Otherwise people still have a sneaky suspicion that the CO2 is building up somewhere... perhaps causing devastating acidification to the oceans...

[*RSJ: And maybe those things are happening.*]

My gut feeling says that the CO2 rise is, over time, ALL due to the sun on the oceans, and that in time, ALL the extra manmade CO2 gets absorbed by the biosphere flux - as happens with volcanic and forest fire CO2... I've understood the "pipe" concept as PRESSURE, not separation... pressure on the plants to grow more... meaning that a rising CO2 concentration points to an even larger quantity of biosequestration going on... and that this is the first of two reasons why Enderbee's figures do not agree with the outgassing one would expect from Henry's Law, if all the oceans' temperature rises by 1 degC. The second reason being, that the oceans for real will only experience a 1 degC temperature rise to quite a shallow depth. I think it should be possible to both measure and calculate the ocean depth that effectively experiences a 1 degC temperature rise when SST rises 1degC. Or perhaps there is a simpler way to measure biosequestration? since THAT is the issue.

[*RSJ: My gut is too skeptical. If we add a huge slug of CO2 to the atmosphere, we might expect CO2 concentrations to increase immediately in the air and in the seas, and slowly in the land biosphere. On the other hand, our models tell us that the ocean has tremendous potential to hold CO2. In fact, it has been 15 to 20 times greater in geological time than it is today, and never much less. According to solubility theory, a like amount was found in the surface ocean. Why? Where did it go? Why did it come back? Is it coming back now?*

[*Some of us know that cloud albedo acts to regulate Earth's surface temperature. Is there a regulator for free CO2? What might it be?*

[*Sometimes the surface ocean layer is called the mixed layer. Surface waves are the tops of circulating currents that entrain air and mix the waters below to a depth more or less of 50 to 200 m. This is a fast process, not as fast as solubility, but quite rapid compared to other processes. A good enough model for some purposes is to treat the surface layer as a homogeneous, dynamic process, not in thermodynamic equilibrium, and with vertical and lateral flow.*]

If people know that all the extra CO2 is beneficial to plants, as well as totally following temperature, the whole climate nonsense will drop. But we need to show these bio-dynamic fluxes clearly enough and provably enough. It's not just a dynamic balance in physics, it's also involving the biosphere, and I think Floor Anthoni may be on to something important here, even if your physics is better than his. The natural flux figures, and the longterm balance, are so large as to shout out this possibility - but people behind computers forget the awesome size and power of the oceans and the biosphere. So I am trying to bring all the threads of evidence together. Land plants AND oceans use CO2 for life (Anthoni shows that oceans use it in the building of calcium-based shells made possible by extra CO2). And since this is IMHO about the biggest single issue overlooked - the sheer size of the total flux compared with human emissions, it is extra important to reach sufficient agreement on the basic knowledge.

[*RSJ: CO2 poisoning begins with drowsiness around 1% concentration. That's 30 times the present, and is unknown to have occurred even in geological times. So until it gets to unprecedented levels, CO2 is a benign, beneficial gas. It is a greening agent.*

[*CO2 is not considered toxic until it gets to about 5%.*

[*For decades engineers sought to perfect combustion by having the byproducts consist entirely of water vapor and CO2. Only conventional wisdom and political correctness (meaning neither wise nor correct) has intervened.*

[*Science is a difficult master. It is incompatible with weasel wording. It struggles to communicate with the scientifically illiterate and the impatient. Is the greenhouse effect real? Sure, but on Earth it's an order of magnitude less than the IPCC says. Can manmade CO2 cause Earth's surface temperature to rise? Sure, but it goes up by an amount too small to be measured, and any effect is overwhelmed by natural processes.*]

Posted by Lucy Skywalker | October 7, 2008 12:09 PM

Derek wrote:

Hello again Dr. Glassman.

May I please draw your attention to recent posts in these threads,
http://www.greenworldtrust.org.uk/Forum/phpBB2/viewtopic.php?t=69&postdays=0&postorder=asc&start=0

and, http://www.globalwarmingskeptics.info/phpbb3/viewtopic.php?f=6&t=113&p=3861#p3861

if you'd like a copy of the excel worksheet I'm compiling, or can suggest any other data sources to use, please email me, Thank you for your time, and considerable help so far, Derek.

[*RSJ: Thanks for the heads-up, and for the quotations from the **Journal** posted with attribution.*

[*As I read my own words in a different context, I find some qualifications need to be restated. These have a similar, underlying logic in*

that the answer to the questions "Does ACO2 cause an increase in atmospheric CO2?" and "Does an increase in greenhouse gases cause an increase in global temperature?" is "Yes, but neither in the way nor to the extent described by the AGW advocates."

[*First, ACO2 emissions almost certainly increase atmospheric CO2 concentration, but reasonable physical considerations show the amount to be small and far less than the AGW folks proclaim. The build-up is proportional to the increase in total molecular CO2 in the atmosphere and the ocean. Atmospheric CO2 does not increase faster than oceanic CO2 due to the alleged buffering effect of ocean equilibrium, slow mixing, or long sequestering time constants in the ocean. The exchange of CO2 between the atmosphere and the ocean is the relatively instantaneous kinetic process of dissolution (solubility) which causes a disequilibrium in the mixed layer. That layer is the buffer for other ocean processes of mixing and sequestration.*

[*The IPCC assumes ocean equilibrium has a force to resist CO2 uptake, which if true would change Henry's Law of Solubility. The IPCC also assumes the natural CO2 exchange to be in equilibrium, and models the ACO2 exchange additively by its radiative forcing paradigm. So in the IPCC model, the conjectured ocean buffer resists ACO2 uptake but not natural CO2. In the real world, the two gases are continuously and irreversibly mixed by wind and ocean circulation, and subjected equally to the same biological and mechanical processes.*

[*The IPCC recognizes that biological processes fractionate, that is, that they have an isotopic preference between 12CO2 and 13CO2. An argument can be made that solubility, too, would also be fractionating because the momentum of 13CO2 is greater than that for 12CO2, so the probability of exchange for 13CO2 should be the greater. Whether Henry's coefficient would be different for the different isotopes is unknown. In practice, it is treated as the same. If Henry's coefficient is about the same, solubility equilibrium would occur essentially instantaneously, but the isotopic fraction in the two media might be slow to achieve equilibrium. These are at most second order effects, especially since the IPCC doesn't model solubility explicitly at all.*

[*While the absorption of CO2 in water is linearly proportional to the atmospheric concentration, the outgassing of CO2 is inversely proportional to the atmospheric concentration, and hence nonlinear. Because nonlinear processes are not additive, the IPCC model does not comport with systems science. That model therefore is not likely to be successful, if CO2 is significant. For this and other reasons, the IPCC has not modeled the carbon cycle according to known physics, in particular, according to the law of solubility.*

[*Second, CO2 is not significant because it is the secondary greenhouse gas, and the greenhouse effect itself does not behave as modeled by the AGW. Physics tells us that additional greenhouse gas will cause atmospheric warming, but that the amount is about an order of magnitude less than the IPCC reckons. The reason is that cloud cover is a strong negative feedback to temperature increases, which the IPCC parameterizes, meaning in this case that it does not simulate clouds dynamically. Thus, the IPCC also has not modeled the hydrological cycle according to known physics.*

[*These deficits are just the tip of the iceberg in the failure of the IPCC to model climate according to the principles of science. Its model fails even to rise to the level of a conjecture because it does not fit all the climate data. In particular, it cannot account for the ice ages. If that omission were repaired, and then if a significant, near term, testable prediction could then be made (often a scientific challenge), it might then reach the level of a hypothesis. Now if that prediction were to be validated (experiment matched the prediction), the model would rise to the level of a theory. Only then could scientists ethically use the model for public policy, specifically to warn of an impending crisis.*

[*In this scenario of model quality, however, validation seems quite improbable because the IPCC has not modeled the carbon or hydrological cycle according to physics.*

[*But never fear. The global **economic** crisis promised via the Kyoto Accords can't come to pass because of the **developing** global economic crisis. And this crisis cannot be solved by anything contemplated today by the G20 leaders, any more than a broken distributor cap can be corrected by any number of repairs to a vehicle's fuel system or drive train. These politicians need to learn that the problem can only be worsened by monetary policy (a lesson learned post-1929), or by buying up banks and CDOs (collateralized debt obligations), or by buying home mortgages, or by stimulus packages, or by bailing out failing industries, or by blaming and regulating credit default swaps. They need to learn instead that the financial system was crippled by the US credit rating agencies, who, abetted by legislators on the take, sold AAA ratings for less than B grade instruments, and then on their own precipitously downgraded them to junk. The credit rating bubble burst, and now among rated instruments only treasuries have a knowable value. By the time all these lessons are learned, and the financial system is righted, we might have gained time to convince enough of them that AGW is a fraud. It's all just rocket science.*]

Posted by Derek | November 14, 2008 2:26 PM

Derek wrote:

> Hello yet again and thank you for the reply above. Greatly appreciated.
>
> I have just come across this,
>
> http://omniclimate.wordpress.com/2008/11/16/two-mile-deep-antarctic-ice-core-reveals-stupidity-of-agw-catastrophism/
>
> I thought you would be interested, and I think your thoughts on it would be very valuable.
>
> Excerpt,

> *"in the core we have measured … the flux of iron in the dust. [Iron] is a biologically-active metal, as it underlies … the conversion of CO2 and nutrients like nitrogen and phosphorus in organic compounds. [We know now that] during glacial intervals iron increases and the biological pump works at its best, whilst during the interglacials like today's, that process is less efficient and CO2 increases."*
>
> With iron availability near zero at the moment, it is therefore little surprise that CO2 has been increasing, admittedly to record levels compared to the past 800,000 years. In other words it may be not just a matter of human emissions, but also of momentarily-inefficient present-day "carbon sinks". "

Maybe in my excel sheet I need to include atmospheric iron (dust) levels?

Does this link into the often mentioned plankton blooms and wind patterns/deposition?

[*RSJ: John Martin's 1988 iron hypothesis at one time appeared to have run its course. To resurrect it now is to add in a loss of perspective on a couple of fronts.*

[*Open ocean experimentation in 1993 plus later simulation validated Martin's hypothesis that iron fertilization would cause phytoplankton to bloom. But both also showed that the reaction was small, highly inefficient, and quite transient. Neither confirmed an effect on atmospheric CO2 concentration. Also no one has reported whether the added phytoplankton was identical to the natural, or whether the blooming would have occurred from other nutrients.*

[*Investigators report that the added iron improves the efficient of the biological pump, a reference to what the IPCC now calls the Organic Carbon Pump, as distinguished from the biological CaCO3 Counter Pump. See AR4, p. 530, Figure 7.10. As shown in that figure, the IPCC considers the Organic Carbon Pump to exchange CO2 directly with atmospheric CO2. That direct interaction seems quite improbable, and is unsupported by the IPCC. Indeed, previously but equally unsupported, the IPCC had shown the phytoplankton exchanging carbon with the DIC in surface water. See TAR, p. 188, Figure 3.1(c). This arrangement of the biological pumps plus the solubility pump (called the Solution Pump in Figure 7.10) is critical to the IPCC model of the CO2 exchange between atmosphere and ocean, and to its conjecture that the ocean buffers against absorption of ACO2 emissions.*

[*The IPCC models the uptake of CO2 by the ocean as the sum of a constant plus three decaying exponentials. See AR4, Ch. 7, pp. 514, 514, and 5.31; AR4, Ch. 2, p. 213, Table 2.14, fn. a. Physically this represents the atmosphere as not one but three (but better four) reservoirs of CO2. The IPCC division of the pumps into three channels is ocean part of this model, leaving only the channeling or partitioning of atmospheric CO2. This model has no physical equivalent in the real world. See above,* ***RSJ*** *response to Ferdinand Engelbeen, 10/1/08. This model deserves no credence, and a superior model is to consider the mixed layer as the unique medium through which the ocean absorbs atmospheric CO2.*

[*The buffering of the ocean against ACO2 uptake from the atmosphere IPCC calls the Revelle factor or buffer factor. See AR4, ¶7.3.4.2, p. 530, where IPCC cites as authority Revelle and Suess, 1957 and Zeebe and Wolf-Gladrow, 2001. All three sources are explicit that they base their buffer conjecture on the existence of a state of equilibrium in the mixed layer. That equilibrium assumption creates a bottleneck, causing the absorption and sequestration of CO2 by the pumps to pace the uptake of atmospheric CO2. This assumption causes the dissolution of CO2 in one view not to follow Henry's Law, or in another view to make Henry's constant dependent on ocean chemistry. These are profound effects that require reformulating the laws of solubility.*

[*Furthermore, the notion that the mixed layer might be in a state of equilibrium is not consistent with the thermodynamic meaning of equilibrium. Winds and both vertical and horizontal ocean currents continuously stir the mixed layer, causing heat and gases to pass between it and the Sun and the atmosphere. Chemistry cannot tell us the mixing proportions of the molecular and ionic forms of CO2 in the surface waters when they are not in equilibrium, and hence in a natural state. Therefore, a reasonable alternative model is that molecular CO2 exists in sufficient concentration in the mixed layer to satisfy Henry's Law at all times. The mixed layer then serves as a buffer in the sense of an accumulator for the formation of the ionic forms of CO2, and for the subsequent physical and chemical processes in the ocean. All physics are satisfied.*

[*In this model, the notion that phytoplankton absorb CO2 from the atmosphere must be discarded in favor of phytoplankton depleting CO2, whether molecular or ionic, from the shallow DIC of the mixed layer. The notion that iron fertilization might reduce atmospheric CO2 fails, to say nothing about the conjecture that reducing CO2 by any means might measurably reduce global warming.*

[*Without mixed layer equilibrium or distinct CO2 channels, the IPCC model for CO2 accumulating in the atmosphere fails. For the same reason, the link between iron and atmospheric CO2 concentration fails. Continuing to study the iron hypothesis may be intellectually and scientifically rewarding, but to link it to atmospheric CO2 concentration is to lose perspective on the reality of the mixed layer.*

[*IPCC discussed the iron hypothesis in both the Third and Fourth Assessment Reports to dismiss it. It also dismissed the cosmic ray link, notwithstanding that its correlation with global temperature is twice that of El Niño. See* ***Solar Wind*** *on this blog. So IPCC dismissal is not authority for the irrelevance of a process.*

[*What is significant is that today IPCC is singularly the source for the prediction of the AGW catastrophe, a prediction it makes without reliance on the iron hypothesis. Consequently whether the iron hypothesis is true, or the degree to which it might have an effect, cannot be relevant in debunking the AGW model. Studying the iron hypothesis with a view toward disproving AGW amounts to a loss of perspective on the source of the problem. It is not ACO2, but it is the IPCC.*

[*Your citation is from the randomly capitalized blog called "The Unbearable Nakedness of CLIMATE CHANGE", and the article is "Two-Mile-Deep Antarctic Ice Core Reveals Stupidity of AGW Catastrophism". This blog is unfamiliar here, and it comes with little scientific credibility. The very title of the article is off-putting. Regardless of precautionary observations, the articles says of the Epica 2008*

conference, and impliedly in reference to the last 800,000 years,

> those results clearly and evidently show that … the concentrations of CO2 have depended on the amounts of iron in dust, with higher availability of iron resulting in lower amounts of atmospheric CO2

[*No one has established that dependence. Oceanus Magazine, published under the auspices of Woods Hole Oceanographic Institution, and reporting (optimistically) on the Ocean Iron Fertilization Symposium it sponsored in September, 2007, said with regard to the last 400,000 years of ice core data,*

> But ice-core evidence cannot prove whether iron-rich dust caused the CO2 declines, or whether both resulted from similar causes. … And natural fertilizations appear fundamentally different from artificial experiments-right down to the type of iron involved. http://www.whoi.edu/page.do?pid=12457&tid=282&cid=35746

[*In addition, there is always one other possibility (since we can rule out phytoplankton emitting iron dust): data reduction error. For the sake of science, someone might subject the dust record to cross-correlation analysis with each of the carbon and temperature records to support any hypotheses about cause and effect. A model might be established for the iron hypothesis, that is, a quantitative relationship for the conjectured dependence of atmospheric CO2 concentration on iron-rich dust concentration. Then that dependence should be tested in the cross correlation between the records. This site serves as an example in its treatment of the carbon and temperature records, along with the physics of solubility.*

[*Woods Hole has produced some excellent and quite quotable reference material. The reports from this conference are not quite of that caliber. The article from Oceanus sets the stage for the whole purpose for the conference in the most uncritical fashion:*

> Global warming is "unequivocal," the Intergovernmental Panel on Climate Change (IPCC) reported in November 2007. Human actions-particularly the burning of fossil fuels-have dramatically raised carbon dioxide and other greenhouse gases in the atmosphere, leading our planet toward "abrupt or irreversible climate changes and impacts," the IPCC said. New, stronger scientific evidence indicates that these impacts may be larger than projected and come sooner than previously expected.
>
> The IPCC, representing scientists from all over the world, shared with Al Gore the 2007 Nobel Peace Prize, which helped ramp up public and political attention to the urgency of taking action on climate change. Meanwhile, some action has been spurred by a combination of international treaties such as the Kyoto Protocol, national policies, and economic forces. From 2005 to 2006, carbon-emissions trading markets tripled, from $10 billion to $30 billion worldwide.

[*Naiveté, hysteria, foolishness, carelessness and politics here replace the scientific virtues of skepticism and precision of expression expected from Woods Hole. Jorge Sarmiento, presenting at the Symposium, added a little perspective when he concluded (references deleted):*

> • Quantification and verification of CO2 uptake from the atmosphere for patch fertilization
>
> - Direct verification is not possible because the relevant processes are global in scale and too small to measure
>
> - Indirect verification by models requires understanding both the physical and biological efficiency and there are many uncertainties
>
> See link at http://www.whoi.edu/page.do?pid=14618

[*The Real World contains*

> [*No Coordinate Systems*
>
> [*No Numbers, No Ratios, No Rates*
>
> [*No Parameters, No Values, No Scales*
>
> [*No Equations, No Graphs*
>
> [*No Weights, No Measures, No Rulers*
>
> [*No Clocks; No Calendars, No Thermometers*
>
> [*No Units, No dimensions*
>
> [*No Infinity, No Infinitesimals*
>
> [*No Sets, No Categories, No Taxonomies*
>
> [*No Uncertainty, No Logic*

[*These are all concepts created by man for his models of the Real World. Consequently, the notions of additivity and equilibrium are attributes of models, not of the Real World.*

[*Science does not require any of its models to be faithful to some other model, so it does not require that any model for climate be linear or not, or be in equilibrium or not, even though those might be attributes of the best of climate models. Moreover, what might be modeled as nonlinear and chaotic at one scale, might be well-behaved at another. A thermodynamic (macroparameter) theory might be linear, while the process theories at the microparameter level are not.*

[*Science attaches quality measures to models based on their inherent power of prediction. Model grades in rank order are conjectures, hypotheses, theories, and laws. Looking backward, a model must account for all the data in its domain just to be a conjecture. Otherwise, it is instantly invalid. Looking forward, it must make a nontrivial prediction to be a hypothesis. When a nontrivial prediction has been validated through measurements, the model becomes a theory. When all predictions inherent in a model have been exhaustively validated, the model becomes a law.*

[*A conscientious modeler will strive to make his model more and more representative of Real World processes, not for the mere sake of fidelity, but to give his model what it lacks in predictive power. Instead of glorifying his model with superfluities, a modeler will instead strip his model of processes that don't contribute to its significant predictions. This adds the virtue of elegance to his model, and moves it closer to the essence of the cause and effect it is to represent.*

[*The IPCC model fails to qualify as even a conjecture, much less a hypothesis. GCMs fail at the conjecture level. The underlying radiative forcing model neither accounts for the paleo record, nor excludes it by objective boundaries to its domain. IPCC applies its model post the industrial revolution, but the model contains no objective criteria by which it might first become applicable at that juncture. Earth did not shift on its axis circa 1750. As shown in this blog, the GCMs do not show the dependence of atmospheric CO2 on temperature evident in the Vostok record and not excludable today. As a result, the GCMs are not faithful to the carbon cycle.*

[*The UN organization is still in the mode of searching for a testable prediction, other than its ultimate prediction of a global warming catastrophe. Until it advances a significant, testable prediction, its model cannot rise to the level of a hypothesis. Until that prediction is advanced and validated, the model cannot become a theory, and therefore cannot be used ethically for public policy.*

[*To now suggest that the GCMs should account for iron-rich dust inferred in the paleo record seems incongruous. The radiative forcing model already neither accounts for nor rejects either the temperature or carbon paleo records, or their relationship, yet those are the first order elements of the AGW conjecture.*

[*The state of disequilibrium in the mixed layer should be a boon to climate modelers; it is to be exploited, not denied. It segregates interior oceanic processes of all types, kinetic, chemical, and biological, from the atmosphere. The mixed layer is a buffer for gases and heat. It is a buffer in the sense of a reservoir, and not a buffer against reactions in the sense of the Revelle conjecture. Good cause exists for the IPCC to strip from its climate model such processes as the Revelle factor and CO2 sequestration, including the iron hypothesis, which is a part of sequestration.*]

Posted by Derek | November 19, 2008 12:50 AM

Derek wrote:

Hello again Dr Glassman,

Thank you for your reply above. I knew your opinions / thoughts would be of great value, which is an understatement.

I recently was sent these links in an email from Questioning climate. http://www.trevoole.co.uk/Questioning_Climate Apparently things are changing at MLO, … literally blowing the words right off the pages.

May I ask you again for your thoughts. http://www.esrl.noaa.gov/gmd/co2conference/poster.html

In particular this linked to pdf. http://www.esrl.noaa.gov/gmd/co2conference/pdfs/changingcarbon.pdf

It appears to me that the MLO until recently assumed to be CO2 depleted (seasonally) by vegetation figures (so regular and with so little variation) appear to be VARYING, the wrong way/s … . But the released mean figures (up to Dec 2007) do not show it yet?

[*RSJ: I don't know what to think about "Questioning Climate". So I'm glad you didn't ask for my opinion on that.*

[*Your citation to NOAA led to the "50th Anniversary of the Global Carbon Dioxide Record, Symposium & Celebration", Kona, Hawaii, November 28-30, 2007. The Symposium Report is at*

http://www.esrl.noaa.gov/gmd/co2conference/Reporters/NOAA_WrapUp.pdf.

[*The opening paragraph follows:*

Earth's inhabitants face a global environmental crisis that is projected to include increased land and water temperatures, rising sea levels, changing precipitation patterns, increased extreme weather events such as heat waves, acidification of oceans, and resultant loss of species. In combination, these changes could cause major disruptions to ecosystems, economies and even, as the Nobel Committee recently recognized, world peace. Key strategies and technologies to curtail anthropogenic climate change are available, but would need to be implemented very soon if dramatic climate change is to be avoided.

[*Unprecedented chutzpa! It starts with the wispy thread of dutifully honored data: the brief, inexplicable, processed MLO CO2 concentration record. While the climatology community is want to discuss the rate of CO2 growth, it advances no model that accounts for that growth. Nonetheless, it extrapolates the growth to global scenarios, feeds them into the most problematic climate models intentionally set to show a sellable warming due to the greenhouse effect in a quarter century or so. These models are faithful to neither the carbon cycle nor the hydrological cycle, and cannot be validated. At the outset, the models are falsifiable in light of the paleo climate record of temperature and CO2 concentration. The greenhouse effect as modeled is open loop when it should be regulated by the dynamic cloud albedo. The model does not account for the ice ages, nor the extreme CO2 concentrations ranging to 20 times today's*

level. This species of model does not rise to the level of a scientific conjecture.

[*For a quarter century, Earth has been at "t minus 10 years" and holding to a tipping point of runaway warming. See* ***The Acquittal****, above,* ***RSJ*** *response to JCAA, 8/12/07. The warming warning may have waned, or perhaps the Kyoto Accords weren't enough for the Symposium climatologists, so they add fuel to their hysteria with urgency, spiced with the loss of species, and the end of world peace. It's the end of everything as we know it.*

[*The Symposium Report is far too lengthy and troubled for a comprehensive analysis here. One particular point of interest emphasized in the first paragraph is ocean acidification. Climatologists model this process as changes in the state of equilibrium in the mixed layer, usually portrayed as different points in the Bjerrum graph. This is part of the IPCC model for sequestration by which ACO2 backs up in the atmosphere due to slow biological processes in the ocean, and which alter the laws of solubility. To be faithful to physical processes, a necessity where the models have no predictive power, the mixed layer should be in disequilibrium. The existing model for acidification is invalid.*

[*Your last link is to Fung, Inez, et al, "The Changing Carbon Cycle at Mauna Loa Observatory". The article was sketchy, leaving too much to detective work and the imagination. A minor but distracting point was that the article references figures by figure number, but the figures aren't numbered, and what appears to be Figure 2 is the third figure. I presume the trace labeled "Mauna Loa amplitude" in the first box is the one that spiked your interest. However it might have been better labeled as "Mauna Loa peak-to-trough amplitude". Presumably this record is normalized, but neither the bold nor the dashed traces appear to be normalized at any particular year, and the bold line is smoothed with no explanation. The Summary box has an incomplete sentence which promised but failed to deliver the ultimate conclusion of the article.*

[*The authors graphed "Mauna Loa amplitude" along with "30°N - 80°N land temperature" for the years 1959 through 2003. A box highlights the final decline from 1991 to 2003. An inset shows the true (i.e., not peak-to-trough), monthly Mauna Loa amplitude from 2002 through the first quarter of 2006. Why didn't they extend the declining trend in the box all the way to 2006.25? As it stands, half the declining trend is quite unremarkable by comparison with immediately preceding decline from about 1983 to 1988. An event might have occurred around 1997, signaled by a break in the short term pattern.*

[*These data cry for a numerical analysis. Visually, the MLO decline seems to lose any correlation it might have had with NH land temperature during the boxed interval. On the other hand, we know that the global average temperature has been declining since around 1995. And IPCC claims MLO is representative of the global CO2 concentration.*

[*In Figure 2 the authors show winter and summer air pressure distribution around the globe, from which they draw conclusions about the circulation. The reader must imagine the circulation patterns.*

[*The article doesn't mention the wind patterns at MLO, nor the nearby outgassing source of CO2. The unrevealed circulation patterns omit the Hadley cells, which should bring a north bound plume of CO2 from the Eastern Equatorial Pacific across MLO.*

[*Fung, et al., speculate about hemispherical circulation patterns to suggest a terrestrial carbon source at MLO, a conjecture once advanced (1960) and later (1996) rejected by Charles Keeling. See* ***The Acquittal****,* ***RSJ*** *response to Ferdinand Engelbeen, 10/3/08, above. They contradict the IPCC claim that MLO represents global CO2 to make it instead hemispherical. A better model to suggest is that the MLO data are even more localized, connected to the Eastern Equatorial Pacific and modulated by the Hawaiian prevailing wind.*

[*The Symposium was a semicentennial pilgrimage in honor of Revelle's and Keeling's contribution to AGW. Go, tell it on the mountain, over the hills and everywhere. Fung, et al. would have been considered heretical for their hint of scientific skepticism.*]

Posted by Derek | November 24, 2008 11:34 PM

Reed Coray wrote:

Dr. Glassman,

Recently I performed four "weighted-least-squares fits" to the Mauna Loa CO2 data as a function of time: (1) a two-parameter model (offset, slope), (2) a three-parameter model (offset, slope, "acceleration"), (3) a six-parameter model (offset, slope, "acceleration", and the amplitude, frequency, and initial phase of a single sinusoid), and (4) a nine-parameter model (offset, slope, "acceleration" and the amplitudes, frequencies, and initial phases of two sinusoids). The interesting result is that the two sinusoidal frequencies are almost exactly one cycle per year and two cycles per year. This means nothing to me, but it might to you. If you're interested, send me an E-mail and I'll reply with a paper I wrote (in either Word 2007, Word 2003, or PDF).

Thank you for bringing science to the AGW hysteria.

Reed Coray

[*RSJ: How did you conclude that the first sinusoid, say, was "almost exactly one cycle per year"? Did you vary the frequency and phase of your model in the neighborhood of one cycle per year and find the maximum? In essence and to the resolution of your algorithm, that is what you would have done had you computed the sine and cosine Fourier spectra of the concentration. What was the actual peak frequency?*

[*Sometimes reduced data records are too pat, meaning that they don't have the noise expected in actual phenomena and data reduction. The MLO CO2 concentration record is an example. One might expect more phase noise in the seasonal component, which sparks an*

interest in the raw data discussed on this blog.

[*The frequency of two cycles per year is an all likelihood the first harmonic (sometimes confusingly called the second harmonic) of the fundamental seasonal cycle. It occurs in the data when the fundamental is not a pure sinusoid. Distortion in amplitude or phase or noise will have that effect. The seasonal fluctuations can be purely one cycle per year but produce a first harmonic if the fluctuations are flattened or rectified in some way, like a morphed triangle or square wave. Those distortions produce harmonics from a true one cycle per year phenomenon.*

[*A likely source for the MLO CO2 measurements is the plume of ocean outgassing from the Eastern Equatorial Pacific. Variations in the intensity or location of the plume could be causing what is witnessed at MLO. If that is the case, then one would expect the seasonal fluctuations there to be well correlated with the wind, either actual or seasonal average. The latter seems to be true, and the wind is out of phase with the terrestrial CO2 cycle by about a month. More precision is needed, and a question still exists whether the MLO investigators recorded the wind along with their CO2 measurements.*]

Posted by Reed Coray | December 12, 2008 10:41 PM

Reed Coray wrote:

[*RSJ: Dr. Coray posts a continuation of his dialog on the MLO CO2 record. By personal e-mail, he sent me copies of his several computer files. At first, I told him this post was too detailed for the Journal readers. Maybe it still is, but the issue of how the MLO record came to pass seems to have a deserved life as its own.*

[*I told him that we're beating a dead horse with the CO2 record. That's because IPCC has the physics of Earth's climate wrong. While greenhouse gases certainly act as a blanket to hold in heat, they do not have the effect modeled by climatologists in their GCMs. These investigators and models prominently omit the strong negative feedback of cloud albedo, which in a warm state of the climate mitigates warming from any cause. In the cold state, the atmosphere is quite dry, greenhouse gas is minimal, and Earth's surface albedo serves to stabilize the climate in the snowball state of a hibernating planet. That, too, IPCC omits. The bottom line is that while the greenhouse gases retain heat, the effect is not open loop as modeled in the GCMs. It arises from and is regulated by the water cycle, including especially cloud coverage.*

[*The IPCC admits as much. Its climate models can't produce enough warming from CO2 alone, so they make the scant warming from CO2 release water vapor to amplify the CO2 effect by a factor of 1.5 (Ch. 8, Climate Models and Their Evaluation, Executive Summary, p. 591) to 2 (4AR, FAQ 1.3, p. 116), and in another place, at least double (AR4, ¶8.6.2.3, p. 631). "Water vapour feedback is the most important feedback enhancing climate sensitivity." 4AR, p. 592. Enhancing means adding value or attractiveness. Webster's 2nd International. It is IPCC's happy increasing.*

[*Water vapor amplifies because IPCC relies on the added moisture to increase the greenhouse effect but not to increase cloudiness, and certainly not to increase albedo.*

[*Thus the importance of the MLO record, which IPCC calls the "master time series" with "iconic status in climate change science", is not just highly exaggerated, but wrong. First, it leads to no verifiable prediction, the ultimate test for a scientific model. Second, the greenhouse gas model the MLO record feeds is not faithful to climate physics, independent of the fine structure of the CO2 measurements. It is this fine structure that Coray explores.*

[*The IPCC goes further. It claims the MLO record contains "evidence of the effect of human activities on the … global atmosphere." The validity of that conclusion, which does retain some academic importance, requires a model faithful to the detail in the CO2 measurements. Coray's post provides a framework for analysis.*]

Dr. Glassman:

The method I used to estimate the frequencies of the two sinusoids (and for that matter, all parameter values) was as follows.

First, I estimated the parameter values of the two-parameter model (offset, slope). Since the weighted residuals are linear in the model parameters, Weighted-Least-Squares (WLS) estimation converges in a single step independent of the "initial guess" of those parameter values.

[*RSJ: The method called WLS typically refers to the classic Gauss-Newton algorithm, an inference confirmed from Coray's Excel program. However, and for what it's worth, Coray used unity weighting throughout, which means no weighting. The weighted residuals would not be called "linear in the model parameters". Instead, the model may be linear with respect to some of its parameters. Specifically, Coray's two and three parameter cases are linear in the first three parameters (which he labels A, B, and C), and his larger models are linear in the amplitudes of the sinusoids, (his D and G). They are not linear in the parameters that express the frequencies and phases of those sinusoids (E and F, and H and I, respectively).*

[*The GN algorithm minimizes the weighted sum square of the residuals between the model and the measurements by setting the partial derivative of that sum equal to zero simultaneously for all parameters. For n parameters, the solution requires inverting an n by n symmetric matrix of the sum of the weighted cross products of all the first partial derivatives. The matrix comprises n(n+1)/2 unique partial derivative products. Its inversion can present scaling problems and may require special numerical techniques, especially within the limitations of personal computer number representation, Excel, and Excel Add-Ins, namely Solver and Fourier Analysis.*

[*However, the algorithm provides an exact, deterministic solution for the variables in which the model is linear. In such cases, it does not converge in the general sense, but provides the solution in one iteration.*

[*Coray's Excel file did not specify a convergence criterion, nor an iteration method. Reasonable assumptions are that he used the Excel Solver routine to minimize the weighted sum of the errors with respect to all n parameters.*

[*A better approach would be to set up the problem with the frequencies and phases of all the sinusoids considered constant, use the GN algorithm to calculate the WLS, then iterate on the frequencies and phases of the sinusoids with Solver. This partitioning of the task into the GN algorithm and the Solver would off-load both processes and increase the speed, accuracy, and dimensional range capacity of the solution. Coray's nine parameter model would require not 45 first partial derivative products but only 15, and the matrix to be inverted would be reduced from 9 x 9 to 5 x 5. The Solver would iterate not over 9 parameters, but only 4. The trajectory of Solver solutions would be along least squares solutions in the linear parameters.*]

Second, I examined the residuals associated with the two-parameter model and noticed a slight curvature. I then added a quadratic term ("acceleration") to the model. Again, since the weighted residuals are linear in the three-parameter model, WLS estimation converged in a single step.

[*RSJ: As it should.*]

Third, I examined the residuals of the three-parameter model and noticed what appeared to be a sinusoidal component in those residuals. I "eye-balled" the magnitude, frequency, and phase of that sinusoidal component. Unlike the two-parameter and three-parameter models, the weighted residuals are NOT linear in the six-parameter model (offset, slope, acceleration, sinusoid amplitude, sinusoid frequency, and sinusoid phase). As such WLS estimation won't converge in a single step. Furthermore, in WLS estimation the "initial guess" of the parameter values may be critical to convergence. As my "initial guess" I used the estimated values from the second step for the offset, slope, and acceleration and I used my "eyeball" guesses for the sinusoidal amplitude, frequency, and phase. I then let the WLS estimation procedure iterate to a solution.

[*RSJ: The GN and Solver routines need to be coaxed into the region of a solution, which justifies the subjective eyeballing. Here, though, one should rely on the power spectral density (PSD) of the process for several reasons.*

[*Coray is performing a spectral analysis, and the PSD helps keep the process objective. At each stage in the representation of the data, the PSD exposes the dominant frequency components in the residuals, albeit with limited resolution in frequency and power. The PSD calculation requires an estimate of the Autocorrelation Function of the residuals. This complicates the Excel spreadsheet by adding a double-length column (using the tape loop analog). However, Coray's file had one worksheet for each of his four models, which can easily be reduced to a single worksheet to cover all models with a separate columns at each stage for the discrete Autocorrelation Function, the spectrum, the PSD and its argument.*

[*The discrete Autocorrelation Function, though, requires uniform sampling, and Coray's data had six holidays in the data, five one-point gaps, and one three-point omission. A good recipe for filling in the data is to first insert the average of forward and backward linear interpolation over three or four points, assigning a weight of zero for each interpolated point and find the minimum WSE, restore all weights to one and then use Solver to replace each linear interpolated point to minimize the WSE.*

[*The Excel Add-in Fourier Analysis will map the Autocorrelation Function estimate into the complex Fourier transform for powers of two. The Excel modulus (absolute value) function then extracts the (real) PSD.*

[*The Mauna Loa data has a PSD characterized by the 12 cycles per year aliasing produced by monthly sampling, especially wide at DC (0 cycles per year), and resembling a catenary with a 1 cpy fundamental component. This suggests that someone subjected the data to a low pass filter. It is evident at every stage in the data representation, and it is evident in each of the frequency components that emerge from the noise.*

[*The PSD shows a fundamental at 1.0078 cpy and a first harmonic at 1.9922 cpy. The WLS algorithm refines those measurements to 1.000519 and 2.000456 cpy. The average frequency of the seasons between 1900 and 2100 should be 1.0000215. An error analysis is needed, but this discrepancy might arise from the interpretation given to the sample dates. The conclusion that the signal at about 2 cpy is a harmonic is supported by the emergence of weak signals corresponding to the 2nd and 3rd harmonics at PSD frequencies 3.00 and 4.01 cpy. A physical model should be developed to validate the measured fundamental frequency, the shape of the seasonal waveform, and to extract the phase of the measured seasonal waveform. The latter needs to be compared with the prevailing wind patterns at MLO, which is a hole in the IPCC conclusions that the MLO record is evidence of human CO2 emissions and that it is modulated by terrestrial processes.*]

Fourth, I examined the residuals from the six-parameter fit and noticed a residual sinusoidal pattern. I "eye-balled" the amplitude, frequency, and phase of this sinusoid. Then as in the third step, I used my estimates from the third step and my eye-balled values for the residuals as the "initial guesses" for the nine parameter WLS estimation. I let the estimation process converge.

Fifth, I examined the residuals of the nine-parameter model. Unlike the residuals of steps one through three, I could detect NO obvious systematic (i.e., non-random) component in the residuals of the nine parameter model.

All of these results are pictorially depicted in the paper. The nine-parameter model estimated frequencies (two frequencies) were 1.000550 cycles per year, and 2.000480 cycles per year.

Again, I would be happy to send you the paper for your review and critique.

Respectfully,

Reed Coray

[*RSJ: The last steps should have revealed the two higher harmonics at about 3 and 4 cpy, and the absence of any others to some specified signal-to-noise ratio. Also, the signal-to-noise ratio can be improved by further extraction of components well below the seasonal effects. I found that my model converged at about 0.037 and 0.106 cpy.*

[*At each stage of decomposition of the estimate, the residual WSE provides a measure of effectiveness. Comparing the numbers provides the variance reduction attained step by step. Coray's 3-parameter reduction reduced the variance by 52%. His 6 parameter reduction reduced the variance of the 3-parameter model by 82%, and the last three parameters produced a relative 36%. Adding two more sinusoids produced variance reductions of 50% and 16%.*]

Posted by Reed Coray | December 13, 2008 11:47 AM

Derek wrote:

Hello yet again Dr. Glassman,

Firstly my apologies for not keeping you more aware of where my interest in MLO has taken me. It seems to have become an obsession, but I hope I may have shed some more light on MLO.

(OK, I forgot to include CFCs - ooops)

I might have gone off at a tangent to most people, but I would appreciate your opinions on the concerns I have recently tried to raise at various forums, and one closed group, that so far have not received much if any reply.

I have posted something similar on several forums as I have on the below thread at Lucy Skywalker's forum, Greenworld Trust.

http://www.greenworldtrust.org.uk/Forum/phpBB2/viewtopic.php?t=102

I am surprised there has been no "rebuttal" (so far..) given the names of at least one or two people who have frequented that forum a lot concerning MLO data discussions...

Just in case, virtually the same is posted at,

http://www.globalwarmingskeptics.info/phpbb3/viewtopic.php?f=5&t=585

and,

http://co2sceptics.com/forum/viewtopic.php?f=2&t=125

and,

http://www.scottishwebcamslive.com/boards/viewtopic.php?t=3765

yours Derek.

[*RSJ: Your skepticism is applause-worthy.*

[*You don't give the ordinate scale factors on your spectra plots. Usually the spectra are given in relative percentage. For your analysis you need the concentration-dependent absolute absorption to compare the effects of the various gases. Is that what you have done? Do you have a publically accessible, online source for the spectra?*

[*The absorption spectra are certainly important, especially because IPCC all but ignore the subject in its Assessment Reports. I cannot generate much interest in the fine error analysis of the SIO measurements. But I would expect a GCM to model the greenhouse effect taking into account these spectra.*

[*Your year-by-year relative concentration curves appear to be at least linearly detrended. Are they quadratically detrended? The lack of outliers may be due to their intentional removal by the principal investigator. It may also may be due to low pass filtering, and that could be the cause of the tight cluster of the curves.*

[*Your observation is that the year-by-year CO2 variations are too pat. What I find far more alarming is the fit of the Ice Core data to the MLO data in your figure attributed to IPCC 2007. The Ice Core data lies interior to the ocean CO2 sink at the South Pole, and the MLO data lies in the plume of the Eastern Equatorial Pacific outgassing source. They should not match.*

[*Remember, the IPCC is now the source of the alarm over global warming, and it is based on its GCMs. Those models (a) are invalid because they do not fit the historical (paleo) record of the ice ages and glacial epochs or of the CO2 paleo record, (b) fail as a hypothesis because they make no verifiable prediction except the ultimate catastrophe, and (c) alternatively are not faithful to either the carbon cycle or the hydrological cycle. These ultimate failings of the IPCC's global warming scare push the fine structure of CO2 measurements well into the noise.*]

Posted by Derek | December 22, 2008 3:33 PM

John, Channel Isles wrote:

Hello Dr G,

Hope you enjoyed a good Christmas and New Year. I escaped to Thailand to catch some much needed global warming and luckily avoided 2 weeks of the 3rd record chill in Europe this winter.

i). I've just seen (caught up!) with another nail in the AGW coffin that of the radiosond (balloon and satellite) measurements taken in 1996 and 1997 that show no greenhouse gas warming signature in Earth's atmosphere 10km up. Do you know if the IPCC have found any room in their official reports for this hammer blow and reality check to their hot air theory?

[*RSJ: Between Climate Change 2001 and 2007, I found 188 hits on "radiosond", including many hits in the References tables. The 2001 Technical Summary left some discrepancies with the radiosond data unresolved. CC01, ¶E.2. The 2007 report was less optimistic, and called for changes in the network. CC07, ¶3.4.1. Safe to say, not much of use has come from the radiosond data.*

ii). News this month that Dr John Theon, a NASA Chief, who supervised Dr James Hansen in his time there has blown the lid on Hansen's antics. In particular Dr Theon has criticised the computer modeling, and implicitly criticises Hansen for "revising to the data set" including Hansen's dodgy practice of hiding his calculations from his peers scrutiny. He's written to the US Senate Minority Report and asked to be added to the anti-AGW brigade. Now Obama has stated his intent to "return to science" the more scientists against Obama's scientifically isolated, politically driven climate agenda the better!

Link. www.theregister.co.uk/2009/01/28/nasa_climate_theon/

[*RSJ: Theon's comments received perhaps more attention than they deserved. He didn't actually supervise Hansen except to administer funds. The information in the media at the time was sufficient to show that Hansen deserved to have been fired for insubordination. For decades he has been sounding the alarm over a tipping point ten years off based on invalid models.*]

iii). The most recent piece of junk science spun into a matter-of-fact by globally chilled enviro journalists desperate for some warming news has been debunked. The BBC, Telegraph, Times, Guardian and many news channels worldwide turned a Washington University study of Antarctic temperatures that were mere computer predictions into warming. A great effort by our biased liberal media to turn Antarctica's static and/or cooling for the past 50 years (even the IPCC acknowledge it!) into warming to rub in the noses of AGW skeptics!

Not too surprising the WU study involves the infamous Michael Mann who 'created' the 'Hockey Stick' data set. Here's some early critiques of this dodgy study and I'm sure there'll be many more in the coming months :)

'Despite the hot air, the Antarctic is not warming up' (Chris Booker, Telegraph.co.uk).

Link. http://tinyurl.com/asolen

Washington University data speculation is 'statistically meaningless' and ignores warmer Western Antarctica and its volcano activity.

Link. http://tinyurl.com/dmef3l

[*RSJ: The on-going cold trend has been most helpful politically, but it doesn't carry much weight scientifically. It has had a negative impact on science literacy. I would estimate that the trend needs to continue for about 30 years before it would be statistically significant. We have major climate changes evident in the paleo record, which has a resolution of about 1300 years.*]

iv). Very much agree with the views you've expressed regards economics and debt spending your way out of recession as being pure folly. Are you a follower of the Austrian School (Von Mises)?

[*RSJ: From what I've read of the Austrian School, I am sympathetic to many points, but lean more toward the Chicago School as the sounder approach. I agree with Von Mises when he warned of catastrophe from inflation. But he said, "What people today call inflation is not inflation, i.e., the increase in the quantity of money and money substitutes, but the general rise in commodity prices and wage rates which is the inevitable consequence of inflation." I find four different definitions of inflation in macroeconomic writings. Macroeconomics will never rise to the level of a science until economists learn to stick to definitions.*

[*Inflation is either a prices phenomenon or a money supply phenomenon, and it is either an increase or a rate of increase. I prefer the ancient definition that it is an increase in the money supply that causes a general increase in prices, and this is not in accord with von Mises. Also I am skeptical that money substitutes have any effect on inflation until currency is driven out of the market by Gresham's law. I think that currency should prove a sufficient parameter.*]

I've followed the financial/bankers meeting in Davos, Klosters, Switzerland and they're still banging on about throwing money at the recession and the environment. The latter is to justify the fraud of carbon credit trading. That's where a banker pays a tulip farmer £2 for carbon credits (because his flowers absorb carbon) to sell it for £10 to a Gas Company needing to 'offset' their carbon emissions. The tulip farmer would have grown tulips anyway. The Gas Co still makes just as much carbon. The environment sees no change whatsoever. The bankers make a fortune from just hot air. Great scam, sorry scheme, no wonder you can't stop these wind bags talking the market up!

[*RSJ: The number of possible nonsensical notions is uncountable. Even if carbon emissions could be eliminated, it would have no effect*

on climate. On the other hand, here in the US, the kids are into the cookie jar with both hands, gleefully strewing goodies all over the house. The expansion of the money supply will have no perceivable economic effect -- until the inflation kicks in. A little recovery, a little velocity to the money, and we're in for a world of hurt.

[*The IPCC fails to model Climate as it is known to exist. Earth has a cold state and a warm state, both regulated by albedo, and rather regular transitions between them. Not so in the GCMs.*

[*Somewhat analogously, macroeconomics can be modeled as having two states, a stable state with last year's currency stock, and a stable state with the inflated money supply. How fast it makes the transition depends on the money velocity, or liquidity.*

[*The world is falling into an economic abyss precipitated by treachery by the three US credit rating agencies and by the US Congress, but conveniently blamed on straw men in our housing market and in federal regulations. The sudden drop in phony AA and AAA ratings collapsed the present value of mortgage back securities, and that rapidly spread into banking and commercial financial instruments, and no correction is in sight. This caused the drying of liquidity. That in turn has put the world into a cycle of falling employment and production, where consumers, producers, and banks are all acting rationally in the short term.*

[*Dumping slugs of money into the hands of these three economic actors will do nothing directly except to cause inevitable inflation. They weren't short of cash in the first place. The inflation, though, will stimulate consumer spending, followed by shortages. Suppliers will be slow to respond because they still won't be able to borrow. The cost of money will have to rise above the rising inflation rate.*

[*The Fed is already planning to monkey with interest rates, repeating its error of the '70s that led to irrational development, double digit inflation, the collapse of an already flaky Presidency, and finally the S&L and banking crises. Stagflation is the predicted result, and it will be an invitation to price and wage controls, an essential ingredient in socialist systems.*

[*It's all very ugly, except that the economic crisis, coupled with the recent cooling trend, will ice public support for the global warming boogeyman.*]

Posted by John, Channel Isles | January 29, 2009 8:22 PM

John, Channel Isles wrote:

Hi Dr. G,

Disappointed the radiosonde balloon/satellite measurements didn't help add water to the sinking ship of the global warming Titanic a little quicker! However a new study by Messrs Paltridge, Arking & Pook has re-examined the NCEP data on upper tropospheric humidity. It was published last month online by Theoretical and Applied Climatology.

http://www.climateaudit.org/?p=5416

In short the study suggests, "Total water vapour in the atmosphere may increase as the temperature of the surface rises, but if at the same time the mid- to upper-level concentration decreases then water vapour feedback will be negative."

Namely it undermines the entire basis of the IPCC's global climate models that factor water as a warming agent and unsurprisingly the study was refused publication in the Journal of Climate. One reviewer objected, "the only object I can see for this paper is for the authors to get something in the peer-reviewed literature which the ignorant can cite as supporting lower climate sensitivity than the standard IPCC range".

There's me thinking science journals only considered the science at hand not the politics of it and impact on the IPCC's fragile egos/reputation!

So what proof positive does the IPCC have to maintain mans trivial (2%) CO2 output magnifies water evaporation and that water is a warming agent in the atmosphere? More specifically that any greenhouse gas, such as water, is leading the charge for a warmer climate when surely it's the suns cycles that would/could add 2 Degrees. After all a desert goes from +40 to -2 Degrees during the course of a single day (i.e. the deserts of Iraq) entirely due to the suns location and zero to do with trivial amounts of greenhouse gas.

Agree with you entirely regards our declining economy. We've now 'returned to value' regards 10/1 Price/Earnings ratio for stock market valuation but there's no sign the bad news is stopping or that rock bottom has been reached. This strongly suggests it's not a recession but a depression we're in for.

The biggest issue is nobody can read/trust a balance sheet. Until we (the market/investors) can ascertain real value there's a loss of confidence to invest and we will continue to see discounting based on this uncertainty. And Britain printing money just adds to the feeling we're treading on quick sand.

Agree also Obama is 'flakey' or I think the new Tony Blair. A grinning middling lawyer that promises a better world in a genuine believable way but then delivers zero with a f**king big bill attached! Only Obama's bill and socialist agenda is the biggest, and fastest, big spending of colossal debt in human history!

[*RSJ: Nice letter. I'm posting it intact, then following with categorical interruptions.*

Disappointed the radiosonde balloon/ satellite measurements didn't help add water to the sinking ship of the global warming Titanic a little quicker! However a new study by Messrs Paltridge, Arking & Pook has re-examined the NCEP data on upper tropospheric

humidity. It was published last month online by Theoretical and Applied Climatology.

http://www.climateaudit.org/?p=5416

In short the study suggests, "Total water vapour in the atmosphere may increase as the temperature of the surface rises, but if at the same time the mid- to upper-level concentration decreases then water vapour feedback will be negative."

Namely it undermines the entire basis of the IPCC's global climate models that factor water as a warming agent …

[*RSJ: Rational people need to defeat the IPCC. It is the fount now of Anthropogenic Global Warming, having inherited the mantle from Revelle and C. D. Keeling. It has the obedience of the peer-reviewed professional journals in climate, and with few exceptions, the large body of climatologists. It can muster an overwhelming band of experts in support of AGW and CO2 pollution. We cannot expect to defeat this armada in any kind of court, including the court of public opinion, through competing, alternative models or challenges to the data IPCC has elected to use.*

[*The task is made more difficult because IPCC will neither defend itself nor engage in public dialog. Having a commanding position in the field, it is content to throw redundant reports over the wall every year or so.*

[*The task is also difficult because IPCC nearly has a lock on climatologists, and it and its community engage in personal destruction for those who stray from the fold. It commands journal publications. So opposition is quite unlikely to prevail on the formalities of academic science – peer review, journal publication, and credentials in the field. In a battle of experts such as we see in American courts, IPCC is likely to prevail on summary judgment.*

[*The article by Paltridge, et al., is an attack on IPCC data, and on its data reduction that concluded net water vapor feedback was positive. These are matters of professional opinion. As a result, I cannot generate much ardor for their results any more than I can over the fact that Earth's climate now appears to have undergone a decade of cooling, notwithstanding the continuing emissions of CO2 from fossil fuels.*

[*My enthusiasm might change, however, were it not for the fact that IPCC models contain fatal flaws. Those known so far are listed on this blog. See* ***Solar Wind***, ***RSJ*** *response, 2/20/09. This list is a candidate to be a separate topic. So far, it includes the following where each is sufficient in itself to defeat AGW:*

> [*1. By virtue of the radiative forcing paradigm, IPCC wrongly makes the background of natural climate and the manmade climate change additive in a necessarily non-linear climate model.*
>
> [*2. IPCC wrongly initializes its GCMs in a state of equilibrium, causing the background of natural warming, which it does not take into account, to be falsely attributed to man.*
>
> [*3. IPCC wrongly models the surface layer of the ocean to be in equilibrium. This has the effects of causing CO2, contrary to the laws of solubility, to accumulate in the atmosphere, ACO2 to increase the greenhouse effect, the rate of CO2 dissolution to depend on the rate of sequestration in the ocean with time constants into a millennium, and atmospheric CO2 to be well-mixed. The latter has the effect of making the MLO record represent global CO2, and covertly to justify unwarranted calibration of the various CO2 measurements to make them all agree.*
>
> [*4. IPCC admits that substantial CO2 gradients exist across the globe, but wrongly models the MLO record as global data, ignoring that MLO lies in the plume of the massive Eastern Equatorial Pacific outgassing. At the same time, IPCC ignores that ice core data are collected inside the polar sinks of oceanic uptake of CO2. The concentration of CO2 should be maximal at MLO, and minimal at the poles, but IPCC makes them contiguous or overlapping through arbitrary calibrations.*
>
> [*5. IPCC wrongly ignores the great planetary flows of CO2 through the atmosphere and across and through the surface layer of the ocean, and then into the Thermohaline Circulation.*
>
> [*6. For these reasons, IPCC gets the carbon cycle wrong.*
>
> [*7. IPCC rejects the Svensmark cosmic ray model for cloud cover, then wrongly models no dynamic cloud effect at all. It does so in spite of the strong correlation of cloud cover to cosmic ray intensity, and the correlation of cosmic ray intensity to global surface temperature. Consequently, IPCC does not model the overwhelming feedback in climate, the negative feedback of cloud albedo.*
>
> [*8. For this reason, IPCC gets the hydrological cycle wrong.*]

and unsurprisingly the study was refused publication in the Journal of Climate. One reviewer objected, "the only object I can see for this paper is for the authors to get something in the peer-reviewed literature which the ignorant can cite as supporting lower climate sensitivity than the standard IPCC range".

There's me thinking science journals only considered the science at hand not the politics of it and impact on the IPCC's fragile egos/reputation!

[*RSJ: This is a naked admission by one reviewer that for him peer review exists not to promote scientific standards but to insure conformity to the accepted model.*]

So what proof positive does the IPCC have to maintain man's trivial (2%) CO2 output magnifies water evaporation and that water is a warming agent in the atmosphere? More specifically that any greenhouse gas, such as water, is leading the charge for a warmer climate when surely it's the sun's cycles that would/could add 2 Degrees. After all a desert goes from +40 to -2 Degrees during the

course of a single day (i.e., the deserts of Iraq) entirely due to the sun's location and zero to do with trivial amounts of greenhouse gas.

[*RSJ: We cannot doubt the greenhouse effect. Additional CO2 in the atmosphere is certain to cause additional warming, so we shouldn't make statements to the contrary. The problem is that the amount of warming for the amount of CO2 is unmeasurably small, albeit positive. This is true even under the IPCC models, which are open loop in the path through cloud albedo. It is much less so in the real world because of cloud albedo.*

[*The positive feedback through water vapor is a fabrication by IPCC climatologists. Their models could not produce enough warming due to a slug of ACO2, so they invented an amplifier. They not only needed specific humidity to increase with global warming, which is certain, but that the added humidity was a positive feedback to warming. In this way, climatologists destabilized Earth in their models. They had created in nature the cone standing on its tip, the round boulder sitting on the side of a hill. This is a philosophical error.*

[*Climatologists should focus on modeling climate in stable states, and investigate how it moves from one to the other. The data show that Earth has a stable warm state, and a stable cold state, and we currently appear to be nearing the apex of the latest warm state.*

[*IPCC's models are fatally flawed for lack of a dynamic cloud albedo. It is by far the most powerful feedback because it gates the Sun's radiation. We can accept at face value that the radiant intensity of the Sun has not changed significantly in the past several thousand years. However when Earth is in a warm state, the Sun's insolation is subject to dynamic changes because of cloud albedo from changes in specific humidity. Svensmark also hypothesized that cloud formation depends on galactic cosmic rays, which themselves are modulated by solar activity. IPCC expressly denied this model. As shown here in* ***Solar Wind*** *Earth's climate is twice as strongly correlated with solar activity than it is with El Niño.*

[*Just as the IPCC GCMs are meaningless without cloud albedo, the conclusions by Paltridge et al. are of little value without including cloud albedo. If they had, their qualified "may increase" would have been far more definite.*]

Agree with you entirely regards our declining economy. We've now 'returned to value' regards 10/1 Price/Earnings ratio for stock market valuation but there's no sign the bad news is stopping or that rock bottom has been reached. This strongly suggests it's not a recession but a depression we're in for.

[*President Obama is an anti-capitalist. He is attacking the accumulation of capital in every avenue. American small businesses will be the target of his top 2% income tax hike. It promises to be huge, especially computed on the margin. This is a taking of profit, the engine of wealth and job creation, and of the seed money small businesses accumulate for expansion and new products. The unattended crash in the stock market is a negative feedback (it's crashing because prices are falling), but that decline takes from businesses the opportunity to raise capital from equity sales. A third avenue for business capital is to mortgage assets, whether the property of the business or of the owner. But that source is dry, and Obama has no plans to fix it.*

[*Obama plans to add the carbon tax, which will fall heavily on major manufacturing and electricity generation. That tax will be then passed on to all businesses and consumers.*

[*Obama's massive new spending means more taxes and more borrowing. This year he will be issuing a glut of a trillion dollars or two in new treasuries, and that will depress prices. That will appear as inflation, raising interest rates and prices throughout the US and the World's economies.*

[*This is no time to invest in a business, and that is reflected in stock prices. The signal from our Leader is sell. And as the market descends, federal revenues decline, and borrowing and taxes must rise again. Socialism consumes the product of capitalism. The bottom is not in sight.*]

The biggest issue is nobody can read/trust a balance sheet. Until we (the market/investors) can ascertain real value there's a loss of confidence to invest and we will continue to see discounting based on this uncertainty. And Britain printing money just adds to the feeling we're treading on quick sand.

[*RSJ: You're quite right. The worldwide economic collapse was caused by the precipitous withdrawal of investment ratings by America's three rating agencies, S&P, Fitch, and Moody's. They had issued AAA ratings to what was little better than junk, and got caught. Instead of letting the market work the problem, they precipitated the Crash of 07/08.*

[*Today, as you say, no one can trust a balance sheet. Without trustworthy reserves, lenders can offer little. The crisis will not be fixed until a transparent, public, objective, and perhaps retroactive rating system replaces what the three Credit Rating Agencies have been free to manipulate with criminal abandon.*]

Agree also Obama is 'flakey' or I think the new Tony Blair. A grinning middling lawyer that promises a better world in a genuine believable way but then delivers zero with a [frigging] big bill attached! Only Obama's bill and socialist agenda is the biggest, and fastest, big spending of colossal debt in human history!

[*RSJ: Obama campaigned on the promise of a Utopia, but took office with a deflating financial system manufactured by his own party. He now seeks remedies without fixing blame, and in that he is doomed. He's trying to convince America that his socialist dreams just happen to fix capitalism-without-capital.*

[*Meanwhile, Obama has thrown the doors of the US Treasury wide open and the little Nancys and Harrys are inside, leading the charge, strewing money everywhere.*

[*Massive spending will do nothing but produce crippling taxes and the insidious tax of inflation through borrowing. Just as IPCC models can't predict temperature without heat (a flow variable not present in radiative forcing models), economic models, even mental ones, are*

meaningless without a variable representing the flow of money.

[*Filling bank vaults with cash doesn't make them lenders. It just puts them in the business of feeding at the government trough instead of assuming risk. A similar result applies in the public sector. A pumped up personal bank account is small compensation for the loss in retirement funds and home values. And the public is not going to return to buying while loans are impossible, real prices are falling, and jobs are threatened.*

[*The whole concept of socialism is based on making the people do what they are not naturally inclined to do. Obama plans to raise the government share of GDP immediately to about 40%. Then while the economy continues in collapse, that share will rise to 50%, maybe 75%. That percentage is the measure of socialism. It is a measure of the loss of liberty.*

[*Spending leads to borrowing, and that produces inflation. It is an inevitable consequence of socialism. The socialist remedy is price and wage controls, and that leads to cheapening of goods and services and shortages. This is Obama's path.*

[*The US economic collapse, accelerated and deepened by Obama, is leading to Depression 2.0. This will drag down the economies of all the free world nations. It will sap US world influence, political, financial and military. The Gordon Browns will move into fill the first void, and Islam the third. What has been gained in the War on Terror will be unwound, leading to a hot war among Middle Eastern nations, focusing immediately on Israel. The threat of a nuclear exchange will become quite real.*

[*Obama is determined to do everything wrong.*]

Posted by John, Channel Isles | March 8, 2009 10:28 PM

John, Channel Isles wrote:

Dr G,

Your comment the IPCC "is content to throw redundant reports over the wall every year or so" had me chuckling. Like you, I fear the scientific debate may never be had in the biased left wing media of America and Europe let alone a Court of Law. But there remain 3 rays of hope.

Firstly the Internet, despite the attempts to crowd out the web with white noise by the propagandists of Gov't and the privately funded frauds, remains a territory for truth and questioning. And in my experience shows a majority of surfers well versed in the many hoaxes AGW is based upon.

[*RSJ: DARPA's little invention has turned into a force to rank near the top of technologies. It has dealt a coup de grace to the pernicious news media, and may yet do the same to the belief-indoctrinated professional journals. It is a cacophony of multimedia junk, but coupled with Google power (and we can't wait for the next Google), it is a treasure trove of information and misinformation. Caveat emptor. Still, it's better than journals of conformity. It is the arena in which real peer review is being played out, as DARPA intended.*]

Secondly the people. Despite the British population here digesting (force fed) a daily diet of biased and ever more shrill propaganda from "Act On CO2" Gov't TV propaganda campaigns, newspapers such as The Guardian and Daily Mail, et al., and the TV channels such as BBC and ITV the public still 60% don't believe a word. In fact the worse the weather the more irrelevant this blanket bias becomes.

[*RSJ: This week media in the US are featuring the latest Gallup poll that shows 41% of Americans think the news about global warming is exaggerated. Even though this is a trend up, it is pitiful – unless 59% of the people recognize it for what it worth -- an evil hoax!*]

Thirdly politics, the only arena where this fraud is pushed for its money raising objectives and where its death must be organised, is showing its first signs of imploding into its vacuous self. China (which suffered huge snow storms last year affecting its economic output) and India about to build a huge national coal fired power grid has no stomach for AGW which is sure to scupper Copenhagen this year. This falls on the heels of the EU 2020 20% CO2 reduction negotiations almost falling apart into a farce. And of course Obama will need to get his Cap & Trade tragedy through Congress which is as you rightly say a huge tax increase on energy which Americans, used to cheap energy (electricity and petrol) just will not stomach.

[*RSJ: Belief in abstract social science theories, and similarly today the nonsense, non-science of AGW, is an exercise for intellectuals, and peculiarly Western. These are not likely to win much favor with hard-nosed leaders of somewhat backward Eastern cultures who are trying to become contenders in world politics without precipitating another tens of millions of deaths from famine.*

[*However, Obama can make great strides in excavating the crisis without any international agreement on carbon.*]

It is the political machine that drives climate change to suck wealth and the freedom of movement from the private sector that will fall apart and/or grind to a halt through recessionary/economic, political/public and international pressures. This AGW bandwagon is just too complex and costly not to fall apart from 1,000 cuts. Europe can't even agree on CO2 so how do Brown and Obama, the two main protagonists of this global fraud, expect to get the World to agree in Copenhagen?

[*RSJ: A major motive among those behind the AGW movement is to weaken the power of the US. That the reverse might come to pass, that an economic collapse in the US should wreck the AGW movement, might define irony.*]

And they haven't got Bush to blame for their assured failure on this occasion poor sods!!

[*RSJ: Loss of the Bush excuse will be of no consequence. Bush was mostly an object in a political campaign of hatred, one of many random targets of opportunity. Before Bush and his cabinet, his attorneys, and a cabal of neoconservatives, it was Gingrich, and before him Reagan. The left will simply abandon AGW like it did Ban the Bomb. It's success is no more important than the economic goals of socialism, regularly shown to be unachievable and impotent.*

[*What counts are the populist goals in a political schema that divides the populace into competing groups of convenience, to be realigned and attracted into a majority base that can carry the leaders to power and control. It's Karl Marx.*

[*For Democrats, the current economic collapse is to be enlarged and exploited. It can be made, either in reality or in perception, into an opportunity made of crisis, as explicitly proclaimed by Rahm Emanuel ("Don't let a serious crisis go to waste") and Hillary Clinton ("Never waste a good crisis"), and undertaken by Barack ("our nation will sink deeper") Obama in his first 100 days*.]

Your economic view matches mine to the letter. Until a few weeks ago I thought this was 'just' a recession we'd pick our feet up from in June. But now we've adjusted back to traditional valuations there's still no sign the devaluation has abated while earnings, employment and most importantly valuations continue to decline.

RBS-NatWest bank was valued at £4,000bn little over a year ago. Despite balls-up Brown pumping £10s of billions in RBS-NW, it today is valued on the London SE at barely £9bn. Between those 2 disparate valuations the Regulators and Auditors have to account for the difference. How will the auditors produce an audited balance sheet now?

Obama as you say is doing everything wrong. The good news is both business and the people, who are doing the opposite (i.e., reducing spending and paying off debt) will kick him out in less than 4 years. The Republicans are back on the capitalist message and have found a united voice. A painful lesson learnt from McCain's fatal error during the Presidential election campaign against Obama when McCain backed the 2nd bailout and failed to connect with the people who had already by then already figured out against bailing bankrupts out according to the opinion polls.

[*RSJ: Collectivism is the goal of American Democrats; individualism that of our Republicans. They organize their parties the same way. Democrats have a set of talking points, and repeat the same messages and phrases with unbelievable discipline and intensity. Republicans have more messages than the number of permutations of people in the room.*

[*Democrats are now handing Republicans a powerful and natural message, but no leader is emerging to make and lead a coherent party with a platform. Neither of the Bushs nor McCain was such a man. Besides, when Republicans get elected to the Congress, they become indistinguishable from the Democrats – all focused on getting re-elected and amassing great personal fortunes, although that is more common on the left than on the right.*

It's very easy to underestimate the intelligence of the public but 60% of Brits do not believe in climate change and 51% of Americans do not believe in bailouts so on balance we should give them credit for being far brighter than the politicians :)

[*RSJ: A race is on between deepening the crisis and enacting Democrat social policies, which are simultaneously both objectives and tools for creating opportunities. Whether an international calamity or just being economically fed up, the American public, the proverbial sleeping giant, will awaken again. But that's tough – 9/11 just roused them, absent a leader.*

[*The question is how much indelible damage can Obama do before that awakening. He may succeed first in creating a tide of Americans running to the UK and Canada for health care, or destroying the pharmaceutical business. He may allow a major war to erupt in the Middle East*.]

Posted by John, Channel Isles | March 11, 2009 8:43 PM

John, Channel Isles wrote:

090313203214

Dr G,

DARPA invented the internet!! Haven't you heard (yet) it was Al Gore? By all accounts he was only 1 vote away from picking up a second Nobel Prize for his second fictional documentary of how the Earth, the Universe and all that's in it revolves around his ego.

To be honest I'm surprised, given the blanket 24/7 media and governmental propaganda, how many do not believe in this hoax. It may have something to do with 'reverse-conditioning'. Namely that we've become so turned off by false scare stories and being told not to eat this, drink that and smoke that every mass consumption message now automatically makes us believe the opposite.

[*RSJ: John from Channel Isles shows how AGW has as much to do with economics as it does CO2.*

[*You hit the nail on the head when you wrote "believe in". AGW is a belief system, a religion, the product of scientific fraud and ignorance, and implanted through repetition and a swelling following. Neither the public reaction nor the model itself is rational, but to understand that requires some scientific acumen. The model is less than a scientific conjecture because it doesn't fit all the data, and because it hasn't been validated. It is less than a scientific hypothesis because it doesn't even make a prediction, other than the ultimate catastrophe, by which it could be validated. For scientists to promote public policy based on a model that is less than a scientific theory is unethical.*

[*Without a minimal level of science literacy, the amount that could be conveyed in a US K-12 education but is not, the public is deprived*

of that healthy skepticism that protects it from charlatans. Our public is a Petri dish for radical politics and movements. We have both in Obama and a Democrat Congress.]

You say, "A major motive among those behind the AGW movement is to weaken the power of the US. That the reverse might come to pass, that an economic collapse in the US should wreck the AGW movement, might define irony". Yes indeed and the outlook actually gets rosier than that. There is a major shift in power unfolding as the 'fueled by debt' consumptive US (and Britain) is losing all leverage to the manufacturers (and savers) of the world such as Germany and China both of whom have no time for quaint idealism along socialist lines or their lectures on how "the new world order" (a Brown speech tag favourite) should all fall into line.

[*RSJ: The consumer sector in the US has remained surprisingly healthy over the last quarter century, while the corporate sector has fallen gravely ill. We are consumers for the World, which is why the World coughs when we catch cold.*

[*Our corporations no longer exist primarily to assume capitalist risks with new products and services. They exist primarily to produce family fortunes for executives. Profits provide ever decreasing seed money for new ventures and product improvements. Businesses are cannibalized through mergers and acquisitions purchased with profits that payoff the deal makers and the outgoing executives. Only the most profitable product lines are retained, and ideas about providing a spectrum of consumer products scrapped. Old line products are retained, and moved offshore to exploit cheaper manufacturing costs when production techniques are fully matured. American labor is continually shifting from high skilled manufacturing to the service sector. Debt is maximized for additional cash at the expense of future profits, leaving corporations a fragile shell.*

[*Businesses like their products have a natural birth-life-death cycle. It is economic entropy. It takes work to keep them alive, work that is no longer being done. The name zombie is well-taken. The US is near death in electronics, autos, steel, fabrics, and now banking, while developing nations profit. We can only hope AGW will be stillborn.*

[*This American disease is the result of a raft of causes. Chronic US government deficits produced a monotonic growth in debt, a consequential chronic inflation, and chronic high interest rates. Those high rates shorten the planning horizon, the necessary break-even-point, for new ventures, and this causes businesses to rely more and more on cosmetic rather than functional changes. Japan especially took business away from the US by government underwriting the cost of money to targeted sectors. US labor law has forced US businesses to sustain bloated and noncompetitive labor costs. The MBA fad has brought into businesses the philosophy of maximizing cash flow to replace market share and consumer loyalty. This MBA policy is equivalent to liquidation. Michael Milken taught American executives how to extract cash from their companies through a series of bonds that reduced their companies to junk. Ronald Reagan promoted mergers and acquisitions, having bought into the enervating theory of increasing corporate efficiency. The federal government social engineered the mortgage market, with unintended results leading to fraud leveraged into a colossal house of cards.*

[*Now Obama is planning to social engineer charities.*

[*Obama, following failed efforts by Bush and Paulson (MBAs, Harvard), is trying to bail out companies whose primary products are golden parachutes and massive executive bonuses. A deserving entrepreneur is one who got a big bailout. Bailouts make little sense to the economy without plugging all the leaks first.*

[*Instead, Obama wants to punch new holes in the hull: nationalized (rationed) health care and the carbon tax.*]

Obama and Geitner have already reached (preached) across to Europe on how they think everyone should, like them, debt spend their way out of recession in a coordinated international lemming-like mass bankruptcy movement (there's safety in numbers if we all go down the toilet together). Germany in response told Brown his spending policies were bankrupt (or words to that effect) and German PM, Angela Merkel, has said: "we don't think we need to draw up a new stimulus package". Meanwhile Jean-Claude Juncker, Luxembourg's PM and Chair of the "Eurogroup" of finance ministers, added sniffily: "The 16 finance ministers agreed that recent American appeals insisting Europeans make an added budgetary effort were not to our liking." Basically the US can get stuffed.

Meanwhile the Chinese PM in no uncertain terms has pulled the red carpet under the Obama teams feet before they even arrive at the G20 asking the US to detail how they intend to repay if China buys any more US Gov't debt. That's a seismic statement so Obama pushing CO2 will all be hot air of little consequence at Copenhagen for a China swimming in $2 Trillion of savings the Obama team desperately need for their socialist spending programme.

[*RSJ: Here's a snippet of competing macroeconomic views on government debt from one source:*

> The conventional view of deficit financing holds that an increase in government debt leads to an increase in private sector wealth. Adherents of this view argue that the increase in wealth, in turn, leads to an increase in private sector spending, which then leads to increases in the price level, output, and interest rates.
>
> Barro [1974] has proposed an alternative to the conventional view. Known as Ricardian equivalence, this view holds that an increase in government debt does not lead to additional private sector wealth. Instead, the increase in government debt is seen as leading to increased future tax liabilities of the same present value as the debt. According to the Ricardian equivalence hypothesis, because government debt is not viewed as private sector wealth, then an increase in government debt does not alter private spending. Hence, changes in government debt do not cause changes in the price level, output, or interest rates. Wheeler, M., *The Macroeconomic Impacts of Government Debt: An Empirical Analysis of the 1980s and 1990s*, Atlantic Economic Journal, 9/99, http://www.iaes.org/journal/aej/sept_99/wheeler/wheeler.htm.

[*So macroeconomics would seem to encompass two competing left wing views: government debt is a stimulus (Keynes), or it is neutral (Ricardo) . So adding government debt may be a good thing, but if not, at the worst, it is harmless. Obama, meaning the entire Democrat government, is clearly persuaded by this one prong and a stump position, or is simply reckless.*

[*Notwithstanding any correlation studies, the government debt in the US has the following attributes. It is never liquidated to any significant extent. As old debt matures, it is replaced with new issues. Thus the debt imparts a perpetual carrying charge that has first draw on the US operating budget, and so saps money from government objectives.*

[*Contrary to the paper, new debt causes no future tax increase. The popular saying in this country is that borrowing places a burden, usually called an unconscionable one, on our children and our children's children. It does no such thing. Additional taxes typically come from tax policy fluctuations that randomly turn the economy off and on as rates go up and down, respectively, and from financing additional spending not to be covered by additional debt.*

[*Some right-wing officials and talking heads say that our government prints money to pay its debt. That is just another bit of erroneous conventional wisdom. This is the banana republic scare tactic, and the US could reach that point, but as yet hasn't. Our government finances new spending 100% by a combination of tax revenues (not tax rates) and debt expansion through borrowing by treasuries.*

[*New and replacement treasuries are sold by auction at a discount, so an inflationary cost is immediately paid. That cost depends on demand. It is subjective, reflecting what the buyers believe is a sufficient discount for the term of the instruments, but being an auction it is also sensitive to supply, that is, the size of the offering. This inflation is somewhat slow to be manifest in consumer prices, but it invariably has that effect. The Consumer Price Index is a decent proxy for the cumulative interest paid on 10 year treasuries for as long as records have been kept.*

[*Market interest rates comprise two components: a value called the utility of money, which is a generally small factor for the delayed gratification in the use of money, plus the perceived inflation. So now we can see that when the government increases its debt, it has borrowed more. It has increased the sizes of the various treasury offerings, and that has caused both an increase in interest rates and a boost in inflation. And the result is aggravated by a positive feedback. A rise in interest rate reduces the net value of the auction to the government.*

[*So whichever left wing macroeconomic theory Obama thinks he is following, he and it are objectively wrong. Increased debt is inflationary. It depresses business activity, job creation, and credit, and hence big ticket consumerism.*

[*Because Obama's spending is not just unprecedented, but truly reckless, it will cause an equally unprecedented economic crunch. It is certain to have dire worldwide consequences, notwithstanding any international political shifts or opportunities it might create. The concern of World leaders for Obama-nomics is well-taken, and to sensible Americans, welcome. What the US surrendered to populism needs external control rods.*

[*By the way, any petty concerns about China are just that. China is not buying American securities out of Tibetan charity. Socialist propaganda addresses the well-being of the people; socialist reality is power and wealth to the ruling few. China has that inscrutable, hard-nosed patience to wait for American treasuries to reach the right price. Then it will buy. It's the rational choice over burying its cash in tea tins.*]

Please do not underestimate the 'loss' of George W Bush to the environmentalists image machine. Kyoto was blamed on Bush here in Europe even though the majority of the worlds countries were equally unimpressed (which our media never let up). Without Bush as the 'boogie man' the enviro-machine is unbalanced to the point of falling over as it has nobody to blame. This was demonstrated at the EU where 11 European nations eked out so many exclusions on the CO2 agreement it leaked like a sieve. The then French PM, Nicholas Sarkozy, and Chair for the EU at the time, fell apart into a waffling mess (as Obama is now becoming without his auto-prompt []) at the Press conference.

[*RSJ: Bush'41 put his signature on the Accords, and Bush'43 erased it. In between, the message that India and China were to be excused seemed to gather a lot of coin in the US. The withdrawal was a lightning rod for the hate campaign, but seemed not so unpopular politically.*]

The EU CO2 debacle is a mild warm up to Copenhagen which will be a shambles with the Indians and Japanese also, I understand, regarding AGW as a novel Anglo-Saxon hobby horse not to get in the way of the economic HGV [] to industrial progress. Without Bush the environmentalists have only poor developing countries to 'vilify' which makes them look pompous and at war with the world. The irony is Bush was necessary to sustain their victim stance, their war, their very reason for fighting for the world. No villain. No hero. No war. No bullets. No AGW.

[*RSJ: Viewed from the US, vilification of developing countries couldn't sit too well with the international socialists. They will have to develop a new convergence theorem: the big polluters (i.e., the West) will become more and more green and less industrialized, while the Third World becomes more and more industrialized, and we will have the glorious convergence in a green social democracy.*]

Regards a war in the Middle-East how can Obama, the dreamy international peacemaker he's promised to be after Bush, sustain a 3rd war? He's already under severe stress and looking what he is, inexperienced and a blagger []. Great oratory but it can only soothe for so long. His team is still incomplete, he's failed to 'reach across the isle' to stony Republicans who've now found their mission statement and drive it home with ever greater popularity amongst debt/spending weary and worried Americans. Pelosi jets round like the 'real' President and Clinton waits any sign of weakness. Obama is surely toast in 4 years!

[*RSJ: A new or renewed Middle East war seems inevitable. As US influence wanes, the gains from the War on Terror will be reversed, and the Islamic forces will turn up the heat on Israel. I wouldn't expect Obama to take any action, at least until after an escalation to a previously unseen level. Before Israel is gone, expect it to use its last weapon.*]

Posted by John, Channel Isles | March 13, 2009 8:32 PM

John, Channel Isles wrote:

090315223256

Hi Dr G,

It's 'official'. We're having a CO2 famine and we need much, much more of this benign gas and lovely plant enhancing fertilizer. Yes according to Award-winning Princeton University Physicist Dr. Will Happer who's declared man-made global warming fears are "mistaken" and noted that the Earth was currently in a "CO2 famine now." Happer, who has published over 200 peer-reviewed scientific papers, made his remarks to the Environment & Public Works Full Committee Hearing entitled "Update on the Latest Global Warming Science" on 28 Feb '09.

"Many people don't realize that over geological time, we're really in a CO2 famine now. Almost never has CO2 levels been as low as it has been in the Holocene (geologic epoch) – 280 (parts per million - ppm) – that's unheard of. Most of the time [CO2 levels] have been at least 1000 (ppm) and it's been quite higher than that," Happer told the Senate Committee. Isn't that just a bugger for the Save the Planet cretins?

US Senate Committee (PDF).

Link. http://tinyurl.com/acsa9n

Alternatively see the news article posted 27 Feb '09.

http://climateresearchnews.com/2009/02/scientist-tells-congress-earth-in-%E2%80%98co2-famine%E2%80%99/

[*RSJ: IPCC fairly reports the history of CO2 going back about 450 million years. See TAR, Figure 3.2 and especially 3.2f.*

http://www.grida.no/CLIMATE/IPCC_TAR/WG1/105.htm

It has rarely been as low as the present level, and frequently has been 20 times as great as the present, based on proxy analyses.]

Also a new paper suggests solar activity has been underestimated over the past 30 years by the IPCC and mans contribution to warming overestimated accordingly. The paper entitled catchily, 'ACRIM-gap and TSI trend issue resolved using a surface magnetic flux TSI proxy model' rather lost me in the title but thankfully I caught up by skipping to the conclusions:

"This finding has evident repercussions for climate change and solar physics. Increasing TSI between 1980 and 2000 could have contributed significantly to global warming during the last three decades [Scafetta and West, 2007, 2008]. Current climate models [Intergovernmental Panel on Climate Change, 2007] have assumed that the TSI did not vary significantly during the last 30 years and have therefore underestimated the solar contribution and overestimated the anthropogenic contribution to global warming."

News story posted 12th March, 2009.

Link. http://climateresearchnews.com/2009/03/new-peer-reviewed-study-falsification-of-the-atmospheric-co2-greenhouse-effects-within-the-frame-of-physics-by-gerlich-tscheuschner/

[*RSJ: Thanks for the link. I've downloaded the paper and hope to give it a decent read. Gerlich, G. & R. D. Tscheuschner, Falsification of The Atmospheric CO2 Greenhouse Effects Withing The Frame Of Physics,* International Journal of Modern Physics B, Vol. 23, No. 3 (2009), *on-line v. 4.0, 1/6/09, G&T(2009). It looks quite interesting. However, and admittedly based mostly on its abstract, I must take issue with some of its six conclusions, (a) through (f).*

By showing that

(a) there are no common physical laws between the warming phenomenon in glass houses and the fictitious atmospheric greenhouse effects,

(b) there are no calculations to determine an average surface temperature of a planet,

(c) the frequently mentioned difference of 33° C is a meaningless number calculated wrongly,

(d) the formulas of cavity radiation are used inappropriately,

(e) the assumption of a radiative balance is unphysical, [and]

(f) thermal conductivity and friction must not be set to zero,

the atmospheric greenhouse conjecture is falsified.

[*Re (a): Clearly by modern physics, the 19th Century name of greenhouse given to the effect is a misnomer. By the Fourth Assessment Report, IPCC unequivocal called the effect a blanketing effect. FAQ 1.1. In that, it can't be faulted.*

[*Re (b): Thermodynamics deals with macroparameters, and in fact that is almost its definition. Macroparameters are generally not measurable, and that includes all the global average parameters, e.g., surface temperature, cloud cover, albedo, but they are calculable. These are estimated in various ways, including thermodynamic heat models and averaging the surface temperature estimated by a grid*

of weather models in the manner of the GCMs.

[*Re (c): Earth has two stable states, although the fact gets little attention in the GCMs. In the cold state, the greenhouse effect is nil because the atmosphere is dry, and water vapor is the dominating greenhouse gas. The cold temperature is maintained by the almost all white surface albedo. In the warm state, the greenhouse (blanket) effect is in full force, and regulated by cloud albedo. The difference is some number, estimated to be about 33ºC. Regardless of any questions about the accuracy of that number, it is highly meaningful.*

[*Re (e): The paper quotes from a summary of the 1994 IPCC Report to introduce the IPCC's radiative balance conjecture. Citing the Third or Fourth Assessment Reports would have been better. The Third is climate comprehensive, generally self-contained, and modifies what was known or said in the earlier reports. The Fourth is not comprehensive, but is rather an updating addendum to the Third. Be that as it may, the concept cited,*

> Over time climate responds to the perturbation to re-establish the radiative balance.

[*This is explicit in the Fourth Assessment Report at FAQ 2.1, Box 1:*

> The word radiative arises because these factors change the balance between incoming solar radiation and outgoing infrared radiation within the Earth's atmosphere. This radiative balance controls the Earth's surface temperature.

[*The authors call this "unphysical", which is not unknown in physics, but it is a strange word and may be a consequence of the original having been in German. In English, it might have meant physically unrealizable, unreal perhaps, impossible, or just wrong. Regardless, a point can be made that IPCC has erred. It has imbued its concept with its subjective, philosophical wish to model climate as small changes from one equilibrium state to another. IPCC postulates no physical mechanism, that is, no feedbacks, by which a radiative balance would be maintained. Indeed, the outgoing longwave radiation is an example of another unmeasurable macroparameter. Being unmeasurable, no feedback path can exist by which the climate would drive the radiation into any particular state, such as a natural value or constant value.*

[*Instead, the climate has a powerful, dominating negative feedback that regulates its temperature against solar effects and the greenhouse effect. That is surface albedo in the cold state, and cloud albedo in the warm state.*

[*Re (f): IPCC defines a key parameter called "climate sensitivity" that it finds surprisingly invariant among its GCMs. TAR, Eq. 6.1, p. 354. It is quite similar to but the reciprocal of the authors' equation (115), p. 72, and both use the symbol lambda (λ). In IPCC parlance, λ has the units K/wm^{-2}, where the flow variable is radiation density, and in the paper, the reciprocal, where the flow variable is the more general heat flow density. The term is Ohm's Law in the heat domain, representing in the IPCC case a resistance and in the paper's sense a conductance.*

[*The authors say,*

> In climate models it is customary to neglect the thermal conductivity of the atmosphere, which means to set it to zero.

[*referencing a 1983 paper by J. Hansen,* et al. *Whatever the custom, IPCC does not set λ to any value, 0 or ∞. It is the single most important factor in AGW. It is the factor by which IPCC calculates a temperature rise for a doubling of CO2.*

[*The greenouse blanket effect survives, but not with the power given it by IPCC to overheat Earth's climate.*

[*At the risk of being pedantic, we want to debunk AGW on its own merits, and to do that we must not step over the line.*

[*Even if we grant IPCC the assumption that TSI has not changed significantly over the past few thousand years, its models are fatally flawed for not handling insolation properly and for faulty initialization. At 1750, the point of GCM initialization, the record shows that Earth's climate is warming at nearly the maximum rate observed between glacial epochs. By assuming that Earth at that point is in equilibrium, IPCC wrongly sets a significant background warming to zero. This causes subsequent temperatures which IPCC attributes to the industrial era to be undergoing a natural or background warming that IPCC per force falsely attributes to man.*

[*The insolation problem is IPCC's neglect of cloud albedo. Whether TSI variations are small or zero, it is modulated by cloud albedo. This is the strongest negative feedback in climate, and overpowers what IPCC attributes to the greenhouse effect. So regardless of the magnitude of the TSI error, the AGW models have the net solar effect quite wrong.*

[*Continued in response to John, Channel Isles, 3/20/09, below, code 090320211826.*]

We can only hope the more 'scientifically literate' Governments table some of this science along with their economic reasoning and scupper the US and British Gov't frauds at the Copenhagen climate change meeting to encourage the organised political death of AGW in full public and media view.

[*RSJ: Hope for a governmental body to decide based on our poor writings that AGW is a hoax is asking far too much. I would be most gratified by a full public hearing in which IPCC appears to defend its models.*]

In your last reply to me you say, "For scientists to promote public policy based on a model that is less than a scientific theory is unethical." True. But politicians in my repeated experience do not act either for the greater good, to uphold their public duty or for reasons such as justice but in fact act only for the interests of minority vested interest lobby/pressure groups is it any surprise? Scientists are in the main publicly employed 'consultants' and have complied to the same pressures of the gravy train that requires reports and policy advise that conform from the outset with what politicians want to hear as end product.

[*RSJ: Agreed, but the politicians are the court of last resort, the body with all the power, including judge and jury, and treasurer. Let's not*

enter the ring taking a swipe at the integrity of the referee.]

Indeed since PM Tony Blair, et al., achieved the infamous '45 minutes attack from Iraq' warning from the so-called Joint Intelligence Staff by playing word tennis with the committee until 'politically acceptable words' were achieved British democratic advise/process has been far enough from the truth you'd need a strong telescope to see it!

Your economic knowledge and insight appears to me as colossal as your scientific and I am sincerely impressed, staggered and not worthy! But you'll, have to explain again I'm afraid how you say US debt will not result in inevitable increases in taxation. The Gov't has no money. It has only two sources; taxes or borrowing and the latter inevitably leads to increases in the former eventually surely?

[*RSJ: It's only rocket science. It's the product of a career in professional stochastic modeling of all sorts of most complex systems, applied to two challenging fields of huge socio-political import. It is informed by a lifetime of reading and fascination with macroeconomics, starting with a mandatory course at university in engineering economics. In my case, these are purely objective pursuits, based on a conviction that things that can be measured can always be handled scientifically.*

[*My climate model is quite well developed, but my modeling in macroeconomics has not evolved into a whole. Professionals in either field could try to swamp me with the weight of irrelevancies, historical perspectives and mountains of data, compounded with peer-review consensuses. But I stand safely on a small island of sound data and authority, free of the subjective models that contaminate the various schools of thought. What macroeconomists and climatologists try to do is to influence politicians, or better, to snow them. I am a trained translator, able to be a link in the process. I am able to provide the pols, and similarly situated individuals, objective questions the pros need to answer categorically, and a perspective on what is important and why.*

[*When we get into taxation, we can quickly get to a point where the words lose their meaning. For example, if a government taxes your savings, your net worth, or your taxes, the tax is more just a naked confiscation, a wealth redistribution. For the sake of discussion, we might imagine that we have defined a region of taxation short of such severe measures. In this region, the currency has not collapsed, and the public possesses a large reserve of liquidable (to resurrect a nice ancient word) wealth which the government can take to the limit of causing a revolt. Empirically that wealth seems capable of growing at a 3% per annum real rate, or less, as the government might allow through minimal regulation, a suitable infrastructure, and a stable currency.*

[*In this model, the government can set tax rates and can borrow from the public, including foreign sources. Governments cannot set tax revenue because of macroeconomic feedback. The infamous Laffer curve expresses that nicely. So invariably the government services its debt with replacement debt instruments, and adds to that stock according to its net of spending over revenues.*

[*So a rational government would want to tax at the rate that maximizes its tax revenue. We have never seen such a government, and it certainly lies not in the direction of a socialist government, but let's press on. We have thus set the tax rates, albeit experimentally determined. And if we are in the linear region of our model, the government borrows the rest from the public. If it can't, then government is bankrupt, debt is paid with the printing press, and the system quickly collapses in ruin. Clues to this impending failure are the ratio of debt servicing to GNP and to the budget, and interest or inflation rates. My understanding, in spite of a conventional wisdom on the right to the contrary, is that the US does not now pay any of its debts with the printing press.*]

Similarly printing money leads to inflation through 'future trashing' of its current held value. I used to think printing money, er sorry 'quantitative easing' is the new PC term for screwing the country, would lead to trashing the currency too. But it seems currencies no longer reflect value and have long since lost their grounding to fundamentals as the Dollar and Sterling would have both gone down the tubes in recent weeks.

[*RSJ: Inflation is a surprisingly difficult subject. Part of the problem is that economists have four distinctly different definitions: it is either measured by the money supply or by prices, and it is either a rate of change or an equilibrium point. In a classic definition, inflation is the total money supply divided by a measure of all goods and services. But that is a steady state accounting, and the rate at which the economy moves from one such state to another depends on the velocity of the money. This is like the photon which must have an impossible-to-measure rest mass of zero, but it has a non-zero relativistic mass that makes it subject to gravity. Either that or space is curved. So when the government spends, it creates velocity, and when it spends more it puts more money into circulation. The same can be said of government borrowing, so borrowing and spending may be two sides of the same coin, so to speak, especially if we assume the government is not borrowing more than it needs.*]

Finally I sincerely hope the Israeli 'button' is never pushed. Obama's soft (dreary) policies may encourage rising Arab dissent but no Israeli leader, even at last gasp, would elicit the weapon of last resort even if an end to Israel was threatened. It would lead to untold vilification and retribution of Jews worldwide and any chance Israel had their borders redrawn by Gov'ts worldwide in the UN. No country in the world would countenance it or support a Jewish State thereafter. It's a no-brainer and time for Israeli and Arab to make peace.

[*RSJ: I cannot imagine an Israeli leader shutting down the nation and packing the last survivors into the boats, like the end game in South Viet Nam, while mothballing its weapons too effective to use. On the other hand, Islam is single minded – Israel must go – and it will grind forward at whatever speed it can muster against whatever obstacles are placed in its way. Islam, with no PC apologies, is willing for the next to last man to die. It is suicidal, fratricidal, and self-destructive. The situation is part no-brainer and part brainless.*

[*This does not create an impasse however. The solution lies at the intersection of the objectives and capabilities of Islam, Israel, and the West -- in a stalemate where Islam is capped into a Mason jar like a specimen. The pacification of Iraq, Lebanon, Afghanistan, and Pakistan was a good start that isolated the evil forces of Islam into three island states. But that is easily unraveled without a US presence. Israel is too small to isolate Islam by itself, so the question is how bad must the situation get in the Middle East before the US and an ally, if one remains, return. The interest of the West, which Obama may yet learn, is the survival of Israel and avoiding a nuclear exchange. Israel's interest is the former, plus assuring, preemptively if necessary, that any nuclear exchange is entirely one-sided.*]

Posted by John, Channel Isles | March 15, 2009 10:32 PM

John, Channel Isles wrote:

Bonjour Dr G, Thank you for the reply. You say the IPCC fairly account for the 450 million year history of CO2 when levels were on occasion 20 times higher than today (sorry your IPCC link didn't work for me to see the charts/account they make). Do the IPCC pass any comment on these occasions like "and life was fried to a crisp" or words to that effect?

[*RSJ: See if the link works now.*

[*I could find no discussion by IPCC of life or climate conditions during these epochs of high CO2 concentration. IPCC does provide a rationalization for the decline from concentrations over 3,000 ppm between 600 and 400 Myr BP to conclude, "The rates of these processes are extremely slow, hence they are of limited relevance to the atmospheric CO2 response to emissions over the next hundred years." TAR, ¶3.3.1. So, whatever effect very high concentrations of CO2 might have had in the past, IPCC seems to be telling us that we're here now, and we're safe so far.*]

Do the IPCC ever account for how the Earth returned to a normal, life sustaining temperature thereafter given their CO2 feeding higher temperature cycle leads to ever spiraling heating presumably leading to Earth's temperature forever reinforced with a positive feedback open loop carbon beach ball bouncing along Earth's maximum sustainable frying (land) or boiling (sea) point?

[*RSJ: No.*]

Regards the IPCC passing comment on the last 450 thousand years we discussed a few months ago and purporting our current CO2 levels are the highest ever recorded during that period did the IPCC ever retract or correct that statement or are they still on record as upholding and/or defending this opinion?

[*RSJ: Let's generalize your question: Did IPCC ever respond to anything? The Answer: No. IPCC cannot be drawn out into the open. It speaks only to politicians, and to neither their constituencies nor advisors, and then by periodic reports.*]

You say "Earth has two stable states, although the fact gets little attention in the GCMs". Are the IPCC's GCMs actually capable of faithfully reflecting (i.e., in a holding pattern) either stable state (hot Earth or cold Earth) without unbalancing themselves with their pre-set CO2 open warming loop to accelerate with Kamikaze-like politicised dedication toward their fry-the-planet mode?

Regards the warm and cold state Earth you say "The difference... estimated to be about 33ºC... is highly meaningful". From a life on Earth perspective it's very important. From a scientific perspective this temp gauge is a reflection of the Sun's and Earth's orbital cycles (patterns of 1,200 years such as sun spots and orbital cycles of 120,000 years) which, depending on nearness/farness, measures the amount of radiation from the sun that impacts the Earth and is retained temporarily/transiently as heat in Earths blanket (atmosphere) as I understand it!

[*RSJ: "Reflection of the Sun's" must be a Freudian slip. In the cold state, the warming from the Sun is slight, and Earth's internal heat and gravitational friction become significant, although I am unaware of any calculations. I do not find it discussed by IPCC, the only source worthy of concern.*

[*Earth's cold states destroy niches over large regions, and when the ice retreats, the proverbial crucible of life opens to experimental species and varieties. We probably don't need to look for external catastrophes, such as asteroid collisions and super volcanoes, for mass or at least wholesale extinctions.*]

But you say "the IPCC postulates no physical mechanism, that is, no feedbacks, by which a radiative balance would be maintained". The term "radiative balance" throws me! We are in a constant state of flux even if we have temporary repeating patterns. Our atmosphere always has greater incoming from the sun than outgoing bounced back. Water vapour is merely a damping effect on this unbalanced (one sided) radiative flow. Excuse my schoolboy physics but where does "balance" come into it?

[*RSJ: GCMs iterate between equilibrium states in which incoming, short wave radiation from the Sun is in balance with outgoing, long wave radiation from Earth. This is IPCC's approximation to Earth's climate processes.*

[*Scientific models are scale dependent in all dimensions. So what might work best at the microparameter scale may be useless and misleading at the macroparameter scale, or at an intermediate scale. This is a reminder that all scientific models are creations of man, and not discoverable laws of nature.*

[*So at the paleo scale, Earth wanders back and forth between cold and warm states. On a century scale, a different model might be adequate, and that is what IPCC attempts to do with its GCMs. It might be good enough to assume radiative balance for a 100 year prediction, just as it might be good enough to assume TSI doesn't change in that period.*

[*Science, however, does demand error analyses to assess the effect of model assumptions. If the domain of the GCMs is limited, science demands an objective criterion for selecting an applicable domain. Otherwise the model is falsified for failing to fit all the data. A model at one scale may provide boundary conditions and initial conditions for a model at another scale. For example, the paleo record shows that at initialization of the GCMs, the climate is warming at a maximum rate, and it shows that natural causes could account for a further rise of 2ºC to 4ºC. IPCC fails to satisfy these requirements, so falsely ascribes natural warming to man.*]

So the IPCC rescues their political agenda from drowning by multiplying mans paltry 2% of the annual global CO2 emitted with

amplification by water evaporation. Then saves (again) the politicians latest tax grab from the flames by ignoring totally the negative feedback of cloud albedo. But you say "Let's not enter the ring taking a swipe at the integrity of the referee" (i.e., the politicians). Excuse me but without the referee (politicians) money funding the IPCC in the first place this entire fraud would never have got so far! It's essential (for a healthy democracy) that bent Ref's get what's coming to them.

[*RSJ: We have two arenas and two battles. The boundary condition for debunking IPCC is the current crop of politicians. We can bring pressure to bear on them from responsible scientists and the public, and a simple demand for a fair hearing. We don't even need politicians who understand the technical holes in the AGW story. In fact we have none of those, and yet some politicians have held fast to a level of skepticism that is healthy among scientists. The next battle is to replace the idiots and socialists that infect our crop -- or at least we can try.*

I fear you will never see the IPCC having to defend their models in public Dr G. Like the DDT pesticide ban those most evil of frauds that populate the shadows and corridors of the UN pulling strings never get banged up in jail. We have to make do with 1,000 tiny cuts in all manner of areas for this fraud/hoax to be slid away and the snakes time to hide in the long grass. Some mud may stick to the most public of figures but that's our lot for retribution.

[*RSJ: The UN is hopeless, and in spite of what might said in its favor, a net negative influence on mankind. Also as you say, the UN cannot be held to account. Hope falls once again on the U.S. The Republican BTU tax and the Democrat carbon tax need to be quashed for what they are -- costly defenses against a fraudulent threat. However, whatever is done in this arena can be undone. Businesses can be rebuilt. It just costs time and money, and a little suffering as the World's standard of living takes a hit. The nationalization of American health care, on the other hand, may be indelible.*]

Inflation, like currency, is indeed hard to understand. I heard a trader say "currency no longer tracks fundamentals... or the Dollar would be worth a tenth of its current exchange rate" referring to the Feds printing of a $Trillion and Obama's spending wracking up the debt. By all accounts (fundamentals) the Dollar should be shredded. The only explanation is the fundamentals don't include all the fundamentals!

[*RSJ: First, a minor point: it matters not how much money is printed if it is not put into circulation. Lacking any evidence to the contrary, I do not believe that the US pays its bills with printing press money, that is, money which is not covered by receipts and borrowing. In other words, I believe the accounting is fair.*

[*The FRB gives away money to its member banks from time to time by overnight lending at rates below market rate. This is a direct cost to taxpayers, an indirect tax in real terms. But as far as the books go at the FRB, it's all then-year dollars and the banks pay back every nickel.*

[*Another way that the FRB affects the velocity of money is by changing bank reserve requirements. In the "long run", the longer the run, the less the effect, and it probably soon becomes negligible.*

[*As far as Obama's accounts go, everything so far is merely a threat. As a threat, it should have a negative effect on the stock market, masked by the froth that constitutes prices. The threat will materialize immediately but incrementally as the feds increase borrowing at the auctions of treasuries.*]

Stock markets and currencies follow the path of existing sentiment whether that be fear or confidence. Neither market fear or market confidence is an irrational emotion like jumping watching a horror movie. Market emotions have real calculations of future losses or gains driving them. The 'value investor' who believes in 'fundamentals' is to my mind detached from half the reality, the market reality, just leafing through a companies balance sheet. In a stock market it's sentiment that values the stock not entirely earnings.

[*RSJ: Again, the US sits in the driver's seat, and worldwide markets tend to follow the lead of the New York Stock Exchange. According to the late Richard Ney, stock prices are manipulated to milk the public. His analysis has merit, and I recommend his* Wall Street Jungle*, coupled with critiques you can find on the Internet.*

[*The stock market is like Las Vegas: no one can extract money based on technical analysis. The alternative to fundamentals is a background of loss based on technicals. I would put examination of balance sheets in the category of technical analysis. By fundamentals, I would mean judgment based on analyses of products and their markets.*]

I think there's a lesson in these regards inflation for you, too. It was sentiment (lack of confidence) in Argentina, Germany and many African banana republics that turned currency to junk status. Trust and integrity (other words for accuracy) backs currency just as much as it backs science and maybe ultimately inflation, too.

[*RSJ: Your comment reminds me of this dialog: "Sahara Forest". "You mean Sahara Desert". "Sure, now".*

[*I am confident that inflation precipitates lack of confidence, not the reverse. Separating cause and effect was impossible for IPCC even when it had the data. The dollar is a fiat currency, so it is backed, as you say, by trust and faith. That trust and faith is a result of currency stability provided reliably by the US government. Obama is on the path to destroying that stability. I think it unlikely that he will reach the point of removing the trust and faith, though Putin seems to disagree. He has proposed a new international currency.*]

'Islam' and radical Islam are two different forces. The great masses of Islam, like every populace, has no taste for war but bringing up their children in peace wearing Adidas or Prada. Radicals who grab power in any country no matter what race or belief is the only danger to be quelled. And Israel's 'bullish' attitude must change as they have ever less sympathy worldwide in an ever more peaceful world (the usual net effect of education, consumerism and industrialisation). In today's light speed communications the bully is exposed, has nowhere to hide and has to answer. I think peace will be made in Gaza sometime soon.

[*RSJ: The thing about political correctness is that it is always incorrect. So I make no apology for lumping Islam with radical Islam when Islam fails to make that distinction, and with vigor, a sense of unanimity, and with force. Islam is a facilitator for its radical elements, and so shares the guilt. It facilitates with pride-filled sacrifice of its children, with the zombie machine called Wahabiism, with money, with training, with sanctuaries, and with hate.*

[*You say "radicals who grab power … is the only danger to be quelled." I disagree on two counts. I don't think all power grabs are equivalent, but neither do I think that the evil ones are only those who can be labeled radicals. Nor do I believe that dangerous people are only those who have managed to grab power. For example, I hold al Qaeda and Hezbollah as evils to be crushed militarily. And among those who did grab power, I would include Hamas, the Iranian ayatollahs, and the Taliban.*

[*By the way, I harbor a strong distaste for all religious governments, regardless of which religion. The way for peace is that of Western philosophy, as manifest in the U.S. Constitution – a secular government, a principle lost on the left and the right in this country, guaranteeing not tolerance but religious freedom. At the same time, I favor only the system of law that has evolved under the Judeo-Christian culture.*

[*You seem to suggest by the word bullish that Israel has been an aggressor. I doubt that you can support that opinion with fact. Once again, we have a cause and effect problem, here separating a long string of tits for tats. It is a war played in slow motion. I believe the clear and correct analysis is the one that opines as follows: if Israel laid down its arms, it would be annihilated; if Islam laid down its arms, we'd have peace in the Middle East. The position you adopt today seems to lean toward the former, me the latter.*

[*I give little weight to the argument that Israel has stepped over the line, if that is what you meant by bullish. The occupation of the Golan Heights or the terrorizing of British military forces, right or wrong, is no justification for rocket attacks on villages or bombing marketplaces and ice cream parlors. This is the "he did it first" whine that is prevalent today in justification for radical stimuli, bailouts, and take-overs. At its core, it is a logical fallacy.*

[*I don't think we've had "an ever more peaceful world". The World has suffered an escalation of terrorism for half a century (in the West) to a century (in the Middle East). It has been honed to an art by Islamic countries who harbor terrorists and support surrogate armies of ragtag, robotized believers. It is next in line among political cancers after Communism and Nazism, which for a while overshadowed and delayed Islamic terrorism. The Islamic leaders have learned to exploit the West's reluctance to fight, (e.g., the US in 1983 Lebanon, and France at all times, even in Paris), and its sanctuaries given to borders, misplaced Geneva accords, and holy things. Meanwhile, the debate is on as to when this murderous conspiracy will have conventional rockets that can reach Tel Aviv, and nukes.*

[*What is your threshold for increased military action by Israel? By the West?*

Posted by John, Channel Isles | March 17, 2009 9:07 PM

John, Channel Isles wrote:

Hi Dr. G,

Thanks for the link to the IPCC (2001 Report) CO2 charts. As far as I can see both the Berner and the Pearson & Palmer 'geochemical' studies on CO2 concentrations dating back 500 million years have no accompanying comment/expansion by the IPCC authors as they have done regards the other 5 CO2 charts.

[*RSJ: See ¶3.3.1, first paragraph. Just Google for "Climate Change 2001" and 3.3.1.*]

Presumably these geological techniques can be tied to an age tagged to life on the planet at the time. There's no onus on the IPCC to do so but has anyone else (i.e., geologists) shown what life was like during these periods of CO2 levels around 2,000 ppm to 7,000 ppm?

[*RSJ: You can probably put together some kind of a story from Internet sources. However, you can find sources that say the level for CO2 that is toxic to life begins between 1% and 5%, or 10,000 to 50,000 ppm. If so, fauna probably flourished during the worst of the periods in response to lush flora.*]

The 3rd sentence in [¶3.2.3.2] states, "On land, experiments have repeatedly shown that current CO2 concentrations are limiting to plant growth (Section 3.2.2.4)." The authors refer to the significant increase in plant growth of most plants to increased CO2 levels which is fair and mighty positive of them. Credit where it's due.

You say the IPCC "cannot be drawn into the open" to answer their false statements or claims regards CO2 levels being at their highest in 450k years. And they answer only to their political masters. Here's Dr. Pachauri, IPCC Chairman, endorsing building a coal fired power electricity grid for 500M poor people in India (i.e., a grid as big as both Europe and Americas combined run on coal) quickly endorsed by Al Gore who promotes BP to build them:

http://www.youtube.com/watch?v=d7lDTuBhb2Y&NR=1

[*RSJ: Pachauri speaks briefly on the video, but the conversation is dominated by Al Gore.*]

So Dr. 'Rasputin' Pachauri endorses strangling European and American energy (by implication industry and the population, too) but fully endorses industrialising for the poor of India. I have another film (my other laptop, currently melted!) of Dr. Pachuari on the Masdar project in the United Arab Emirates. This is a 'sustainable' and 'green' city built in the desert, ironically entirely funded by oil money, at the cost of $450,000 per resident. Very sustainable! Here Dr. Pachuari endorses increasing taxation on oil as "too cheap" to repeat one

of his favourite phrases "to encourage behaviour change" (i.e., the socialist ideal of moving the populace from choice and private cars to Big Bro public transport).

Similarly President Obama has stated his intent "to make green energy profitable". He's referring to taxing oil and coal so heavily that solar, wind and other renewables look good on paper. The news today is that his $648bn Cap & Trade energy bill has got 'inflation' and will now cost the US $2 Trillion which will be added straight to industries and consumers energy prices via a Carbon Con trading exchange run by his buddy in Chicago. It's a small world politics!

[*RSJ: Carbon Con apparently means a "carbon confidence game" as a reference to so-called carbon offsetting programs. The phrase appears to be more prevalent in the UK than in the US.*]

Thank you for the Richard Ney book tip. I'll seek it out as the stock markets shortly beckon for investment opportunities as soon as they crash (again) very shortly. It may be the earnings news due in 2 weeks that precipitates the next round of carnage or Barrack and Barney barracking capitalism at every opportunity that the markets private investors just decide to pack up and go home!

Can you explain your "alternative to fundamentals is a background of loss based on technicals" based investment strategy please? Has it ever been set to work and er, worked!

[*RSJ: Trading on technical information is quite like roulette. The system has a friction, the house cut or tax that goes to the brokers. All traders have the same information, which they may or may not use. Ney, however, says the situation is worse. Stop loss orders accumulate in the books held by specialists on the floor of the exchange. They trade for their own accounts, and so, according to Ney, precipitate runs in their favor and liquidating the pool of stop loss orders, a guaranteed loss for the investor. If Ney was correct, the market has a frictional loss and is rigged against anyone who posts stop-loss orders. So the investor must have a rather sizable edge from his fundamental analysis to overcome this lossy background.*

[*Has it ever worked? Everyday. Winners and losers are decided by chance and after the fact. The lucky ones are the winners, e.g., Madoff, and we revere them.*]

My strategy involves what I call 'velocity'. Namely any stock that has been absolutely trashed and hit the stock market floor and I have at least an inkling (it has some cash, a decent product or in a sector that offers upside or being taken over) or something a touch more than a vein hope of rising again (by a factor of at least 10 having previously been 20 times higher). It's worked incredibly well to date on my tracker stocks I just hope it works when I put real money in the slot machine!

Lumping Islam with radical Islam is unfair. Only radical Islam will attack you. Similarly when you set out to 'police' radical Islam and bring them to justice if you do not differentiate the two you wreak murder of civilians in your fight for 'justice' which rather defeats your own purpose (justice).

[*RSJ: Adjectives fail us when trying to describe the reaction of the civilized world to the practice of terrorism. If any civilized body should be especially outraged, it would be moderate Islam, whose image is blackened by the radicals. Instead, moderate Islam is actively engaged in facilitating terrorist activity around the World. It shelters murderers in homes, mosques, hospitals, and market places. It condones attacks behind children and noncombatants.*

[*The West has developed fantastic weapons to minimize collateral damage. Islam tries to maximize it.*

[*Moderate Islam's purpose, of course, is to cry "unfair" when fire is returned, to hold up the dying child it just sacrificed for the cameras. The essence of terrorism lies in public sentiment, and the media are the megaphone. On offense, the goal of terrorism is to weaken political resistance; on defense, its goal is to weaken military response.*

[*Islam professes worldwide ambitions for caliphates and caliphs, and sharia. These have been incompatible with Western thought since the enlightenment. Moderate Islam needs to step forward as a competitive, peaceful religion, joining in modern, civilized behavior. Either that or be marginalized as an unacceptable political movement.*

[*The purpose in resisting Islam is not justice any more than justice was the goal in resisting Communism and Nazism. We eradicate bacteria, but not for justice. Marginalizing Islam is sanitation.*]

This is why Israel is "bullish". If the British was to respond to an IRA bomb with a bombing mission over Northern Island or tanks rolling into Dublin to round up a few terrorists and taking out 20 civilian families as 'casualties of war' it wouldn't be long before the terrorists ranks multiplied and world opinion dried up.

[*RSJ: If that were the equation, you'd be correct, but it is not. The media reports indicate that Israel's responses are tough, but measured. It has taken out apartment buildings which had been identified as housing terrorists or as launch sites, and have warned occupants to evacuate ahead of time. It's tanks have indeed rolled through Gaza, but the reports indicate that it did not wantonly fire on buildings, but returned fire. If these reports are not true, I'd like to know the evidence, and in that case your equation would suddenly have merit.*]

I agree Israel must arm and defend itself. But its excessive use of force in retribution does not attack/select the few terrorists but takes out whole streets. The British gave up waging war with soldiers and tanks in N. Ireland against the IRA and instead sent in the SAS to selectively target the very few who were actual trouble makers.

You overstate terrorism as "war" or something that is growing. It is the skirmishing of the few and of little consequence. Given a world population of 4.3bn you must expect the odd bomb every so often. It is the nature of western politicians to hype this trivia to justify the defence industry. And the job of the media to bring us something remotely interesting. The world is currently at peace (there is no

war to call of, anywhere) with just skirmishing by America and Britain in Afghanistan and Iraq and of course Israel with Palestine. It's about time Israel toned down their response and the Palestinians actually made up their minds for once and accepted a deal on the table.

[*RSJ: We are at loggerheads on this issue. I would take issue with your choice of words (excessive, overstate, odd, trivia, peace, skirmishing) as unwarranted. In 2008, over 3,000 rockets and mortars struck a small part of Israel's 8,000 square miles during the 8 months in which there was no cease fire. This was twice the number of 2007 attacks, and its been doubling every year since Hamas took power in Gaza.*

[*Is 20 strikes a day what you mean by the odd bomb? Would 10 such attacks a day on the Channel Islands' 5,000 square miles be acceptable for a "toned down … response"? Since it doubles every year, when would you estimate that your threshold might be crossed?*

[*Consider if you would that Hamas is now on its fifth generation rocket, which has a range of 45 km, doubling almost every generation. And consider that Jerusalem and Tel Aviv will be within range of the next generation. Is this a time for a toned down response? Must Israel just sit back and wait? Would you in Guernsey?*

[*And now consider that Iran is promising a nuclear weapon sooner than later. Is one or two nukes the odd bomb? Is this the warmth and comfort of peace?*

[*I would consider the response of the West and of Israel inadequate and quite dangerous.*

[*In closing, you say, "It's about time … the Palestinians actually made up their minds for once and accepted a deal on the table." Or, what? The Palestinians rejected a nation state for themselves in 1947, and unequivocally at every opportunity since. The only nation state they want is Israel.*

[*Islam rails against Israeli occupation. The West interprets that to mean the settlements in the Golan Heights, the West Bank, and Gaza, and pressures Israel to pull back in a civil demonstration of diplomacy. To Islam, occupation means Israel in Asia. The dual nation solution is a meaningless slogan, a phantasmagoria, a Western self-delusion that keeps the problem perpetually unsolvable. Compared to us, the Islamic forces have infinite patience. To Islam, time is never up.*]

Posted by John, Channel Isles | March 18, 2009 9:29 PM

John, Channel Isles wrote:

Hi Dr G,

Yes, Gore does dominate the BBC interview. His lust for talking 'at' people to talk them round and convince of his cause reminds one of the ailment's elixir salesman. Dr Pachauri is content with his position and status. But those few words of his, endorsing a massive coal fired grid for India, says more in 7 seconds than the 30 mins of tragic waffling from Gore.

[*RSJ: My bit about Gore dominating the video was just for the benefit of our readers, and not meant to detract from Pachauri's message or the importance you attached to it. I was only surprised by the choice of coal, and not by India's plan to develop and to emit CO2 in the process.*

[*This action by India, endorsed explicitly by the head of the IPCC, and backhandedly endorsed by Al Gore is not a surprise. But it is direct evidence of the nature of the AGW movement. The only symmetry in it is a socialist one: to create equality between the developing and the industrialized nations at the expense of the latter. Like the Carbon Con game, reducing CO2 is a rationalization, and an expendable objective.*]

Thank you very much for the stop loss comment. I've seen this happen where large institutions' stop losses kick in and hit share prices at key points and precipitate huge falls. Their loss (and market makers' tricks) should be my gain the way I aim to invest. :)

[*RSJ: In* Wall Street Jungle*, Ney recites incidents in which his clients lost money to stop loss manipulation. We can't verify his data, but his analysis is coherent and objective. As a result of Ney's whistle blowing, he was banned from NBC, which is somewhat validating. I also believe he had testified before Congress more than once.*]

I see the Fed have just printed $1.1 Trillion this week under the coordinated cover fire of white noise provided by Barrack, Barney and every other Democrat in Washington's distraction tactics to keep the news off the front page. Again can you explain in layman's terms why this printing of debt is not cause for Americans to move country? Printing money (quantitative easing) has never worked in the history of printing money (i.e., printing debt). You say it's because every penny printed will be repaid to the Fed. But the inflation whilst in circulation cannot be "controlled" surely as the Fed purports and risks inflation at the least and hyperinflation at worst.

[*RSJ: Mere printing money is not the issue. It is not banana republic printing press financing when the central bank gets something of value for the money. And to have an effect, it must be put in circulation. That is the nature of the Fed's incomplete announcement of 3/18/09. It intends to spend up to $750 billion on agency mortgage backed securities and to buy up to $300 billion worth of Treasuries.*

http://www.federalreserve.gov/newsevents/press/monetary/20090318a.htm

[*According to The Australian Business with the Wall Street Journal, the Treasury purchases will be made over the next six months.*

http://www.theaustralian.news.com.au/business/story/0,28124,25209174-643,00.html

[*In an earlier announcement on 3/3/09, Treasury announced that its Term Asset-Backed Securities Loan program and FRB lending are for owners of AAA-rated asset-backed securities (ABS).*

http://www.treas.gov/press/releases/tg45.htm

[*Are these formerly AAA rated, or is this a problem that the rating agencies downgrading of subprime mortgages cannot be tracked into the ABS holdings? Or is it the more general problem of distrust of all agency ratings?*

[*The announcement is not sufficient to determine the exposure of the FRB in these ABS loans. The FRB doesn't tell us its intended average loan-to-value ratio, nor how it is going to determine asset value. Indeed, determining asset value is the core of the problem since the rating bubble burst. The program may be unprecedented, so history is of no use to assess the implications of this project.*

[*We do have a history to assess the risk the FRB is assuming for itself and the nation by increasing its ownership of US debt. The last time the Feds did this was in the '60s, leading to it owning about 25% of US debt by about 1975. Its objective then was to control interest rates.*

[*What the Fed did was interfere with the market for Treasuries and create a false inflation rate for market interest rates. By 1975, real commercial interest rates were negative, and anyone who did not borrow was a fool. Leading up to that time, the US had been on a spending, borrowing, and building spree -- cities in the desert, wind farms, mortgages, limited partnerships for anything imaginable, apartment houses, high rises, office space, excess manufacturing capacity, many of which sat empty or idle.*

[*In 1975, unemployment was 4.6% and rising at unprecented rates (2.2% per year), while the demand on the Fed to buy Treasuries was no longer sustainable. So the Fed let go of its end of the rubber band.*

[*The Fed not only stopped its price support for Treasuries, but dumped much of its stock on the market. Treasury rates went through the ceiling, and with it interest rates. What was left of Carter's pitiful administration was torpedoed. As interest rates soared, portfolio values plummeted. A great deal of money was lost almost instantaneously. S&Ls went under first, followed within the decade by the banks. Unemployment fell for a few years, then soared to a new post WWII high of 10.75%. Reagan cut taxes, restoring some confidence, and unemployment came down steadily for his eight years. Congress bailed out the S&Ls, and then the Fed in a little known maneuver bailed out the banks by overnight lending at negative real interest rates.*

[*The Federal Reserve Board caused a major economic crisis by attempting to control interest rates. It took 15 years to return to an equilibrium.*

[*We don't know yet how much new borrowing Obama's plan will require. That depends on how big a hit the government takes in tax revenues in the present crisis, and upon the rate of expenditure required for his bailouts and budgets. If we knew that, we might able to assess how much of Obama's spending will cause short-term inflation and how much will be rolled forward into a compound crisis. It could be very ugly. Less harm would be done in the long run if the Fed did not intervene.*]

Jim Rogers the ex-Quantum Fund (George Soros) millionaire investor claims Ben Bernanke "has got it wrong for every one of the 300 weeks he's been office". Meanwhile Britain's tragic £75bn printing experiment (with another £75bn authorised) has had zero positive effect to date with a disaster attached that's resulted in a 6% devaluation of £Sterling in 8 days. All commentators now regard Britain's economic outlook as "catastrophic".

[*RSJ: Is it possible that the Bank of England is adding liquidity to the UK economy not exactly by printing, but by lowering bank rates, reducing reserve requirements, and by buying gilts and commercial assets? It might be quite parallel to what the US FRB and Treasury are doing.*]

You mentioned Madoff which brings up my favourite issue around the scandals of banking and finance. Namely the abject failure (again) of Regulators and Auditors. Time after time these faulty systems fail miserably because of inherent fatal flaws. Brown, Bernanke and Obama have been vocal about a new international regulator, plus some more regulations and then some more regulators (whilst the Auditors equally culpable in their way for inaccuracy have kept their heads down and nobody has mentioned a peep about their part).

[*RSJ: Repeatedly auditors examined Madoff's books, tipped by a whistle blower, without discovering that not only was he running a Ponzi scheme, but that he was not actually making trades at all. His trades were falsified, manufactured in his back room. I wouldn't call this an inherent flaw in regulation, nor blame the President and his cabinet. I'd call it incompetence and breach of duty, with criminal implications.*

[*In the US, Senators and Congressmen get rich in office by converting campaign war chests into personal accounts. Senators especially and to a lesser extent Congressmen allow subjects of federal regulations to participate in the drafting of those regulations in exchange for campaign contributions. This is back room, committee stuff. If they don't choose to contribute at first, they get a second chance to buy in when the bill goes to conference. Change an* or *to an* and*, insert or remove a comma here or there, change a date, and the loopholes are built-in. But not to worry! The opportunities don't end there. If the regulators come around and start getting too intrusive applying unfavorable regulations, for another campaign contribution the Senator or Congressmen will intervene and call off the regulators.*

[*What needs to be done is follow the money, and trace the contacts between the Madoff regulators and Congress. Not too likely, eh?]*

AIG, a solid $150bn market cap world class insurance company, was brought to its knees by a handful of gamblers in its London and Connecticut offices playing casino games with derivatives. AIG was regulated by 430 regulators. And Hank Paulson, Bernanke, Barrack, Barney and Brown, et al. want 431 to solve the next one! It's just a question of numbers then, the difference between 430 and

431 regulators, if only we knew they were 0.22% away from saving AIG!

[*RSJ: AIG was up to its hips in creating and trading indecipherable AAA CDOs, a product of its MBAs. When the rating bubble burst, so did its portfolio. Stuff that linked backed to subprime mortgages, or that might have linked back, went first. Then everything that was valued according to the rating system.*

[*Paulson and Bush'43 saw nothing out of the ordinary in this. After all, they're both Harvard MBAs. What's Geithner going to say without even an MBA!*

[*The book value of these unreadable portfolios runs into the trillions of dollars, at what, 10 million per ABS? The number of regulators needed to comb through these toxic assets is not in the hundreds, but likely in the tens to hundreds of thousands. This is not a practical approach. We cannot regulate the financial market into doing its fiduciary duty, we cannot untangle the ABS mess by sheer manpower, and we cannot trust the regulators going forward.*]

You say moderate (fair word) Islam "harbours and facilitates the terrorists". As I recall Saudi harbours the Western infidels and their tanks to allow an attack on Saddam, too! Meanwhile Dubai, which interests me immensely, puts up with alcohol, partying and casual dress code in many parts of the city. Similarly Southern Ireland harboured the IRA but did Blighty send smart bombs across the border to Dublin after every bomb to take out a couple of terrorists (and 3 civilian families as 'collateral damage')?

[*RSJ: I don't buy your moral equivalence here. A Western infidel, tank or not, is not a terrorist.*

[*I don't think the anti-Islam activity you describe is limited to Dubai. Similar tales have been told about Saudi princes on travel. Could it all be true?*

[*Your last question about Blighty excesses is rhetorical, right? If you're suggesting that this has a parallel in the War on Terror or in Israel's actions, you'll need some evidence.*]

Instead of an outbreak of intolerance and acting in anger and revenge ("tit for tat" as you say) how about just targetting the terrorists and if moderate Islamists "harbour" and "facilitate" then a slap on the wrist rather than blow up their friends and 'facilitate' a recruitment drive for terrorism maybe a better policy!

[*RSJ: You misunderstood my tit for tat. I was talking about the situation Israel faces where each side claims every strike in a long string of strikes is payback.*

[*How about this instead? If a house shelters terrorists or serves as a launch site for weapons, we warn the residents out, then level it. And if a house fires on a friendly, we do the same but without the warning.*

[*Islamic terrorism is a lethal game. It cannot be countered with slaps on the wrist. Is it not war waged by surrogate aggressors?*]

Excuse me if I use your words and comment on with categorical interruptions in brackets: …

[*RSJ: At this point, John, to his discredit, loses it. What follows concerns Israel, and is neither rational nor fact-based. He does not answer factual questions put to him, but in places, turns unseemly. John's third rail sensitivities contribute nothing worthwhile to this blog.*

[*As we say in contract bridge, it's time to review the bidding. It starts with the AGW movement, which I contend is fortunately being frustrated by the US economic crisis. While the crisis has, not surprisingly, spilled over onto the whole world, AGW is a political movement, targeting the US first and foremost. Objective economics tells us that Obama's massive spending program should deepen the economic crisis. His carbon tax program may yet be enacted, but like the other carbon programs, expect it to be honored in the breach. It is harshly anti-business, anti-industry, anti-wealth, and anti-power. And it is economic and scientific foolishness.*

[*Obama is torn between an unwillingness to combat Islamic terrorism, and a misguided campaign commitment to pursue bin Laden through Afghanistan. Today Obama committed his latest diplomatic faux pas in the hope that Iran might be seduced into abandoning its nuclear weapon program intended to put it in charge of the new caliphate. The President pushes the world closer to the day when Israel is either invaded or makes a preemptive nuclear strike. This will be the time when the US will have to return to the area in force, and under much less favorable circumstances.*]

Posted by John, Channel Isles | March 19, 2009 9:15 PM

John, Channel Isles wrote:

090320211826

Hi Dr G,

For your info there's a new peer reviewed paper which has been published in the International Journal of Modern Physics (G. Gerlich & R. D. Tscheuschner) entitled 'The Falsification of the Atmospheric CO2 Greenhouse Effects Within the Frame of Physics"

The Abstract reads: …

[*RSJ: This is the same article, G&T(2009), reviewed here at John, Channel Isles' suggestion of 3/15/09 (090315223256). The abstract is quoted there. Since he introduces the paper again, and because I said that I intended to give it a more thorough examination, I did, and provide the following critique.*]

Gerlich and Tscheuschner's study concluded, "The horror visions of a risen sea level, melting pole caps and developing deserts in North America and in Europe are fictitious consequences of fictitious physical mechanisms, as they cannot be seen even in the climate model computations. The emergence of hurricanes and tornados cannot be predicted by climate models, because all of these deviations are ruled out. The main strategy of modern CO2-greenhouse gas defenders seems to hide themselves behind more and more pseudo explanations, which are not part of the academic education or even of the physics training."

From the Conclusions: "The derivation of statements on the CO2 induced anthropogenic global warming out of the computer simulations lies outside any science."

[*RSJ: This concluding statement of Section 4, p. 91, defies comprehension. The authors use the word* derivation *four other times, none of which explicitly applies to CO2: "derivation of macroscopic quantities", "correct derivation of the factor quarter [1/4]", "derivation of political and economical decisions" (twice). The use of the definite article in the phrase "The derivation [singular!] of statements [plural]" seems incorrect, lacking a predecessor in the paper. Section* "3.3, Different versions of the atmospheric greenhouse conjecture*" does criticize 14 statements relating to CO2 and the greenhouse effect, but none of which it attributes to IPCC, the subject of the paper, according to ¶1.2.*

[*Gerlich and Tscheuschner (hereafter, "Gerlich") provide 205 references, of which 8 are IPCC sources predating the Third Assessment Report. The latter is Climate Change 2001, and is reference [30], the paper's ninth IPCC source. However, the latter is used just twice, and in the catch-all reference "[23-30]". P. 11, p. 13. Gerlich's 2009 paper is out-of-date in its criticism of IPCC.*

[*Gerlich states,*

> In all past IPCC reports and other such scientific summaries the following point evocated in Ref. [24: J.T. Houghton et al., Scientific Assessment of Climate Change - The Policymakers' Summary of the Report of Working Group I of the Intergovernmental Panel of Climate Change (WHO, IPCC, UNEP, 1990)], p. 5, is central to the discussion:
>
> "One of the most important factors is the greenhouse effect; a simplified explanation of which is as follows. Short-wave solar radiation can pass through the clear atmosphere relatively unimpeded. But long-wave terrestrial radiation emitted by the warm surface of the Earth is partially absorbed and then re-emitted by a number of trace gases in the cooler atmosphere above. Since, on average, the outgoing long-wave radiation balances the incoming solar radiation, both the atmosphere and the surface will be warmer than they would be without the greenhouse gases … The greenhouse effect is real; it is a well understood effect, based on established scientific principles." P. 11.

[*The Third Assessment Report repeats the same explanation for the physics of infrared absorption. ¶1.2.1, pp. 89-90. This admitted simplification is a misleading over-simplification. Gerlich focuses on this over-simplification. The papers asks and answers in the negative what it calls "three key questions":*

> 1. Is there a fundamental CO2 greenhouse effect in physics?
>
> 2. If so, what is the fundamental physical principle behind this CO2 greenhouse effect?
>
> 3. Is it physically correct to consider radiative heat transfer as the fundamental mechanism controlling the weather setting thermal conductivity and friction to zero? P. 13.

[*Gerlich says,*

> Schack discussed the CO2 contribution only under the aspect that CO2 acts as an absorbent medium. He did not get the absurd idea to heat the radiating warmer ground with the radiation absorbed and re-radiated by the gas. P. 72.

[*Gerlich provides "Figure 28: A simple heat transport problem." It contains a one dimensional medium, such as a laboratory experiment or the atmosphere, bounded at each end with temperatures T1 and T2. This is an elementary model in thermodynamics, except that in this case the temperature varies linearly between the nodes, T1 and T2, where since T1 > T2, T1 is the source and T2 the sink.*

[*Gerlich considers Figure 28 to be a thermal conductivity model, and uses the parameter λ it introduces as one of two "fundamental thermodynamic properties … that determines how much heat per time unit and temperature difference flows in a medium". P. 6. In classical terms, heat passes from one body to another by a combination of conduction, convection, and radiation. (Convection can be cast as conduction via a flow in the medium.)*

[*With regard to Figure 28, Gerlich discounts convection, dismissing it as something to be avoided. This is not an objectionable assumption. However, Gerlich also discounts radiation by declaring, "any effects of the thermal radiation (long wave atmospheric radiation to Earth) are simply contained in the stationary temperatures and the measured Joule heat." P. 73. This is the removal of the "absurd idea", already declared, that greenhouse gases re-radiate.*

[*"Stationary temperatures" would not mean statistical stationarity, but instead constant. In other words, Gerlich impliedly made the nodes into a heat source and heat sink. Another implication of Gerlich's construction is that his "CO2-greenhouse effect", defined on p. 44 and quoted below, is the absurd re-radiation.*

[*The problem with Gerlich is that heat transfers from T1, Earth's surface when used as a climate model, to T2, the corresponding atmospheric sink, primarily by radiation. Conduction and convection exist internal to the medium, but neither completes the path to deep space. If Gerlich intended T1 to represent a constant temperature source, and T2 to represent the top of the atmosphere, Figure 28 needed a third node, T3, a sink, such as deep space, and a resistance for radiation from T2 to T3.*

[*Gerlich supplies its own misnomer to the greenhouse problem: thermal conductivity, which is not a simple conduction as the name suggests. By analogy with the names used in electricity, it would be called a heat conductance, which provides no more clarity, or better the reciprocal of another common parameter, heat resistance. The latter is attractive, because it fits the Fourth Assessment Report, where IPCC revised its explanation for the physics of the greenhouse effect:*

> The reason the Earth's surface is this warm is the presence of greenhouse gases, which act as a partial blanket for the longwave radiation coming from the surface. This blanketing is known as the natural greenhouse effect. The most important greenhouse gases are water vapour and carbon dioxide. The two most abundant constituents of the atmosphere – nitrogen and oxygen – have no such effect. 4AR, FAQ 1.1, p. 97.

[*Gerlich provides values for the thermal conductivity of nitrogen, oxygen, argon, and carbon dioxide. Table 5, p. 9. From these data, it concludes that CO2 has at most a 0.03% effect. Gerlich provides no data for spectral absorption or absorptivity, but nonetheless draws the following qualitative conclusion:*

> After Schack 1972 water vapor is responsible for most of the absorption of the infrared radiation in the Earth's atmosphere. The wavelength of the part of radiation, which is absorbed by carbon dioxide is only a small part of the full infrared spectrum and does not change considerably by raising its partial pressure. P. 92.

[*Gerlich observes,*

> Al Gore confuses *absorption/emission* with *reflection*. Unfortunately, this is also done implicitly and explicitly in many climatologic papers, often by using the vaguely defined terms "re-emission", "re-radiation" and "backradiation".

[*In fact, an important model for a microwave mirror is that the reflecting surface absorbs energy and re-radiates a portion of it at the same frequency. This model helps account for the Doppler shift seen in reflections where relative motion is involved. To say that a greenhouse gas absorbs and re-radiates conveys the sense of it acting as a microwave mirror. The gas does indeed absorb microwave energy, heats, and then re-radiates according to its temperature, presumably with the continuous spectrum of a black body or modified according to its absorption spectrum, depending on its density.*

[*Modeling the atmosphere, or simply the greenhouse gas portion of it, as a blanket removes the ambiguous re-radiation concept, and replaces it with a resistance path for heat. Unfortunately in removing the objectionable part, Gerlich threw out the baby (radiation) with the bath water (re-radiation).*

[*So Gerlich protests against its own straw man, that the CO2 does not act like a glass house:*

> All fictitious greenhouse effects have in common, that there is supposed to be one and only one cause for them: An eventual rise in the concentration of CO2 in the atmosphere is supposed to lead to higher air temperatures near the ground. For convenience, in the context of this paper it is called *the CO2-greenhouse effect*. Lee's 1973 result [109] that the warming phenomenon in a glass house does not compare to the supposed atmospheric greenhouse effect was confirmed in the 1985 report of the United States Department of Energy "Projecting the climatic effects of increasing carbon dioxide" [91]. In this comprehensive pre-IPCC publication MacCracken explicitly states that the terms "greenhouse gas" and "greenhouse effect" are misnomers [91, 142]. P. 44.

[*Then it concludes that the greenhouse effect does not exist:*

> The point discussed here was to answer the question, whether the supposed atmospheric effect has a physical basis. This is not the case. In summary, there is no atmospheric greenhouse effect, in particular CO2-greenhouse effect, in theoretical physics and engineering thermodynamics. Thus it is illegitimate to deduce predictions which provide a consulting solution for economics and intergovernmental policy. P. 94.

[*So Gerlich appears to have disproved the re-radiation model for greenhouse gases, discarding the direct longwave radiation through the atmosphere, to conclude the greenhouse effect does not exist. To the contrary, the greenhouse effect exists and it is well-represented as IPCC describes it, a blanket to longwave radiation. The Section 3 title, "The fictitious atmospheric greenhouse effects", the core conclusion of the paper, "Falsification of the Atmospheric CO2 Greenhouse Effects" is wrong.*

[*In Gerlich we have good credentials, a small error in decent enough physics for the most part, strong anti-AGW conclusions, but another faulty paper that will be scored among and against the skeptics. It hurts the cause of debunking IPCC.*

[*That is not to say that IPCC modeled the greenhouse effect correctly. By choosing radiative forcing as its paradigm, it does not model heat, the flow of energy by convection, conduction, and radiation. Its GCMs have no explicit flow parameter, and appear not to compute the temperature drop across media. The paradigm converts every process into a radiation equivalent, and adds them as if the model were linear, which it is not:*

> The nucleus of the most complex atmosphere and ocean models, called General Circulation Models (Atmospheric General Circulation Models (AGCMs) and Ocean General Circulation Models (OGCMs)) is based upon physical laws describing the dynamics of atmosphere and ocean, expressed by mathematical equations. Since these equations are non-linear, they need to be solved numerically by means of well-established mathematical techniques. TAR, ¶1.3.2.

[*And:*

> [U]nder the conventional definition of linearity, a system is linear if it is both additive and homogeneous. Zadeh and Desoer, "Linear System Theory", McGraw-Hill, 1963, p. 138.

[*and is non-linear if it is not linear. This venerable text on linear systems goes on to refine the definition to overcome some exotic examples whose linearity depends upon the initial conditions. These are not applicable here.*

[*This leaves us with Gerlich's key question 3 about physical process modeling. The question is not competent.*

[*Science does not demand that a model be faithful to physical processes. Although a model that pretends to emulate physics to some degree had better not leave out any real processes significant to its degree. A physical emulation may never leave out any first order effect, like IPCC's GCMs do when they emulate Earth's climate without a dynamic albedo.*

[*The test for a scientific model is solely whether it makes non-trivial, validated predictions. A thermodynamic model of weather might show such predictive power with no real, measurable processes in the model at all.*

[*Henry's Law for solubility is important in climate, and it requires knowledge of a coefficient called Henry's Law constant. This constant originally was defined as dependent only on temperature, and that definition suffices for first order solubility effects in most applications. Henry's Law constant is also slightly dependent on salinity, and that knowledge has refined the Law, but not invalidated the original form. One cannot rule out the possibility of a third order effect. (IPCC assumptions make solubility dependent on ocean sequestration processes, a conjecture that confounds Henry's Law.) So science demands no physical correctness at all, and first order effects may be adequate.*

[*Thus in consideration of this analysis, the subject paper is less than helpful. Nonetheless, here are the submitted links:*

By Physicist Dr. Gerhard Gerlich, of the Institute of Mathematical Physics at the Technical University Carolo-Wilhelmina in Braunschweig in Germany, and Dr. Ralf D. Tscheuschner co-authored a July 7, 2007 paper titled "Falsification of the Atmospheric CO2 Greenhouse Effects Within the Frame of Physics."

Journal of Modern Physics B, Vol. 23, No. 3 (30 January 2009), 275-364

World Scientific Publishing Co.

There's a freely available post-print version 4.0 from the preprint server of the Cornell University:

http://arxiv.org/abs/0707.1161

Links.

Story 17 March. http://climateresearchnews.com/

http://www.worldscinet.com/cgi-bin/details.cgi?id=pii:S021797920904984X&type=html

Posted by John, Channel Isles | March 20, 2009 9:18 PM

Luke wrote:

[*RSJ: A believer in AGW who identifies himself only as "Luke", posted the following criticism of* ***The Acquittal of Carbon Dioxide****. His post appeared originally on Jennifer Marohasy's blog on 3/26/07. http://www.jennifermarohasy.com/blog/archives/001968.htm*]

So many shonkies - such little time. Alas Jeffrey Glassman seems to pop up in all the right denialist places. Obviously gets around.

[*RSJ: Shonkies: dubious or underhanded persons, an Aussie slang ad hominem.*]

Sigh - not getting much better Jen.

Yawn.

Nothing new and why bother posting the demolition when it's already been done by another (below). Perhaps David Archibald can help get him published?

[*RSJ: Archibald: Australian geologist; entrepreneur; climate writer and speaker; Member of the Board, Lavoisier Group, chartered to countering decarbonisation; co-member of Senator Inhofe's Minority Report:* More Than 700 International Scientists Dissent Over Man-Made Global Warming Claim.]

http://www.crossfit.com/mt-archive2/001475.html

Kalen M. #5 wrote a nice succinct response, so I feel silly posting my monstrosity now. But I wasted the evening typing it up, so here goes anyway :)

This essay (I don't deign call it a "publication") is rife with straw-man attacks, and misrepresentations of climate science. The Introduction, and the section labeled "Climatologists's view of Vostok data" invent a story of how climate scientists hid, or ignored, the fact that CO2 lagged temperature, but then when "other analysts" revealed the lagging, climate scientists quickly jumped in with the "amplification" defense. Of course, none of this other than the final reference to amplification is cited, because it's all a complete fabrication. Why do AGW "skeptics" have to tell themselves stories to make themselves feel better?

[*RSJ: Of course it's published. The following are from Dictionary.com:*

> Publish: to issue (printed or otherwise reproduced textual or graphic material, computer software, etc.) for sale or distribution to the public.
>
> Publication: the act of bringing before the public; announcement.

[*What snarky Luke means, of course, is that* ***The Acquittal*** *didn't get screened by one of the journals that only publishes approved doctrine.*

[*Vostok CO2 measurements were published as early as 1983. Barnola, J.-M., D. Raynaud, A. Neftel, and H. Oeschger. 1983.* Comparison of CO2 measurements by two laboratories on air from bubbles in polar ice. *Nature 303:410-13. A correlation between CO2 and temperature was known by 1987. Barnola, J.-M., D. Raynaud, Y.S. Korotkevich, and C. Lorius. 1987.* Vostok ice core provides 160,000-year record of atmospheric CO2*. Nature 329:408-14. A citation used by Luke, Caillon,* et al., credits Fisher et al., for the earliest recognition of the lag:

> In 1999, Fischer et al. [H. Fischer, M. Wahlen, J. Smith, D. Mastroianni, B. Deck, Science 283, 1712 (1999).] estimated that the increase of CO2 lagged Vostok temperature by 600 ± 400 years at the start of the last three Terminations, but the gas age–ice age difference at Vostok may be uncertain by 1000 years (1) and thus obscures the phasing of gas variations with climate signals borne by the ice. Caillon, N. et al., *Timing of Atmospheric CO2 and Antarctic Temperature Changes Across Termination III*, Science, vol. 299, 3/14/03, p. 1731.

[*So the climatology lag between recognizing temperature and CO2 in Vostok ice cores and detecting that CO2 couldn't have been the cause because it lagged temperature was 16 years. Caillon* et al*. also tried to soft-pedal the cause & effect problem, saying,*

> The analysis of air bubbles from ice cores has yielded a precise record of atmospheric greenhouse gas concentrations, but **the timing of changes in these gases with respect to temperature is not accurately known** because of uncertainty in the gas age–ice age difference. We have measured the isotopic composition of argon in air bubbles in the Vostok core during Termination III (~240,000 years before the present). This record most likely reflects the temperature and accumulation change, although **the mechanism remains unclear**. The sequence of events during Termination III suggests that the CO 2 increase lagged Antarctic deglacial warming by 800 ± 200 years and preceded the Northern Hemisphere deglaciation. Bold added, Caillon, *et al*., p. 1728.

[*Even after Climate Change 2001, the AGW community was looking for excuses to counter the CO2 lag phenomenon.*

[*These articles were cited for reasons other than the one that Luke guesses. All good scientists are skeptical, and skeptical in all things. Any good scientist considering the AGW model would be skeptical. It's not a matter of "feeling better" as Luke speculates, but is a consequence of the fragility in scientific models, especially in the formative stage.*]

> Now, granted, I have seen some *popular* publications that claim the correlation between CO2 and temperature in the historical record is proof of the greenhouse effect of CO2. But never any actual up-to-date *scientific* publications. There's a distinction.

[*RSJ: Not to let another snide remark pass, observe that Luke perversely distinguishes between believers in AGW and skeptics, a scientific virtue, by the adjectives* scientific *and* popular*, respectively. It is the believers who are on the band-wagon, and the scientists who are skeptical. Luke would cast Einstein's first five papers and Watson and Crick's paper on DNA as not scientific. Luke is unaware of the castigation of peer-reviewed journals by one of its own:*

> Richard Horton, editor of the British medical journal The Lancet, has said that "The mistake, of course, is to have thought that peer review was any more than a crude means of discovering the acceptability - not the validity - of a new finding. Editors and scientists alike insist on the pivotal importance of peer review. We portray peer review to the public as a quasi-sacred process that helps to make science our most objective truth teller. But we know that the system of peer review is biased, unjust, unaccountable, incomplete, easily fixed [*RSJ: jiggered, not repaired*], often insulting, usually ignorant, occasionally foolish, and frequently wrong."
>
> http://en.wikipedia.org/wiki/Peer_review, citing from http://www.mja.com.au/public/issues/172_04_210200/horton/horton.html.

[*And always wrong whenever it prints an article passively affirming AGW.*]

> Another observation I had is that several quotes are taken out of context, and used in a sense so at odds with their original meaning that the author just comes across as sloppy. For example, the RealClimate quote saying that CO2 doesn't come from the ocean (and making it seem like RealClimate is a bunch of wankers considering all the other quotes that say it does) is talking about the *recent spike in CO2*, not the historical Vostok data. In fact, RealClimate states that the ocean can exchange CO2 with the atmosphere, but that it's been sinking over the last 100 years or so (*not* that it's always been sinking, as Glassman implies they say).

[*RSJ: Wankers: persons who are full of themselves, egotistical; vulgar Aussie slang ad hominem.*

[*Luke intentionally misstates and misrepresents* ***The Acquittal*** *to criticize it. What RealClimate said, and which was accurately stated was:*

> The oceans cannot be a source of carbon to the atmosphere, because we observe them to be a sink of carbon from the atmosphere.

[*And the response was,*

> Instead, this new analysis establishes that there is no contradiction in the oceans being simultaneously both a source and a sink.

[*Parsing this simple text for Luke, RealClimate said that when the ocean is a sink for CO2, impliedly a net sink, it no longer can be a source for CO2. The response in* ***The Acquittal*** *is to contradict that specific distinction, the one applicable to sinks. The ocean is a source for CO2 regardless of its net productivity. Luke's charge that* ***The Acquittal*** *implied anything about whether the climate was net a source or a sink is false and unfounded.*]

> Anyway, he spends most of the essay going to great lengths to show that CO2 really does lag temperature. But as above, this has never been in dispute. See http://icebubbles.ucsd.edu/CaillonTermIII.pdf

[*RSJ: Luke misses the point of the paper altogether. It credits others with the discovery that CO2 lags temperature in the Vostok record. It establishes for the first time that the CO2 in the Vostok record follows the complement of the solubility curve. Along the way,* ***The Acquittal*** *shows how to measure the lag, and shows for the first time that the lag fits the transport time in the thermohaline circulation. This leads to a novel transport model for the carbon cycle.*]

> But he also tries to make the point that the CO2 is *entirely* dependent on the ocean, and not other sources such as the land biosphere. Why he wants to prove this is beyond me (maybe to show how climate scientists are just **so** wrong?), but his methods are fishy: He basically vertically scales and shifts, and then horizontally shifts the solubility curve to an arbitrary extent to show that it "fits" the Vostok temperatures. That makes this comparison next to useless. Any slightly-downward-curving line could be "fit" to the data using this method.

[*RSJ: Luke's offset of the word entirely appears to be an attempt to make a quotation. The word is used only once in* ***The Acquittal****:*

> The Vostok data support an entirely new model.

[***The Acquittal*** *takes great pains to explain and discuss what happened in IPCC and realclimate.org thinking. It ends thusly:*

> Regardless, the analysis here shows that the well–known, fixed and constant physics of the temperature–dependent solubility of CO2 in water accounts for **all** the Vostok CO2 concentration measurements.

[*Parsing again for Luke's sake, the "regardless" means regardless of the foregoing, the data is consistent with the solubility of CO2 in water. This conclusion doesn't even say that it is ocean water as Luke has erroneously interpreted the written word.*

[*Luke misrepresents the article when he reports on the "fishy" technique of overlaying a scaled and shifted curve upon another. This was shown as Figure 7 without guile as an "artful plotting". The purpose was abundantly clear. It was to show how the discovery was made that the shape of the Vostok CO2 concentration as a function of temperature resembled the solubility curve.* ***The Acquittal*** *called it an "apparent effect", and set about in the next section to relate how that effect was measured, how well it fit, and how it yielded, for the first time, a physically meaningful operating point.*]

> Also, the solubility curve he starts with is a 5th-order best-fit itself. The fact that it supposedly fits the Vostok data "better" than the author's own 5th-order curve done from scratch (figure 22) really casts doubt on the author's mathematical methods. By definition, the 5th-order best fit curve will fit the data better than any other 5th or lower order curve. Whatever method he is using to calculate which curve fits "best" is erroneous.

[*RSJ: Luke confuses himself to obfuscate. The excellent fifth-order fit is to solubility data over the temperature range of 0ºC to 60ºC. Figure 6. The polynomial fits to the Vostok data are over a temperature range of about 12ºC to 14ºC. Figure 22. As stated in the paper, solubility fits the Vostok data within a fraction of a percent of the best polynomial, it does not chase artifacts, it has superior end effects, and it has physical significance.*

[*Luke thinks his observation about an nth order fitting better than a lesser order is profound. It is trivial and irrelevant.*]

> Now after all this, he never gets back around to proving, or even addressing, his most important claim -- that the climatologist "defense," that CO2 has an amplifying effect, is bogus. All he offers is that the climate never ran away to catastrophe, so the CO2 couldn't have had any effect. But this isn't what climatologists are claiming. The claim is, instead, that these hot periods (caused by external factors such as solar variation) lasted a **lot** longer than they should have, and got hotter than they should have, and the reason was CO2 greenhouse causing a positive feedback with the temperature. In other words, without CO2, these hot periods would have still happened, but they would have been shorter and cooler. (http://www.realclimate.org/index.php?p=13)

[*RSJ: The conclusion of* ***The Acquittal*** *is that CO2 "has neither caused nor amplified global temperature increases." The reason is that the measured rise of CO2 is 100% accounted for by solubility feedback. The paper does not say or imply that debunking amplification is the most important claim. And speaking of what wasn't said, some climatologists might have said what Luke attributed to them, but it is not what IPCC said.*

[*What Luke doesn't appreciate is that while the greenhouse effect causes warming, and hence CO2 causes warming, the greenhouse effect does not regulate climate, but its effects are regulated by the powerful, negative albedo feedback not modeled by IPCC. Luke does not realize that any CO2 effect, while indeed a positive feedback, is too small to be measured, especially closed loop under albedo control.*]

> And feedback can occur without it being catastrophic, as any engineer knows -- it's called nonlinear feedback.

[*RSJ: Luke better not try to teach engineering. He doesn't understand feedback any better than does IPCC, and his assertion is*

ambiguous. Feedback less than one, and for Luke that includes negative feedback, does not produce instability. Nothing can be said in general about stability and whether the feedback is linear.]

> Basically, the way I see it, there's 4 "pillars" to the current AGW theory, none of which has been cut down by any of these "skeptics" so far:
>
> 1) Our knowledge of chemistry and atmospherics predicts CO2 as a GHG
>
> 2) The past climate record is consistent with CO2 amplifying the temperature rises

[*RSJ: Luke's second pillar is from IPCC:*

> The Vostok record of atmospheric CO2 and Antarctic climate is **consistent** with a view of the climate system in which CO2 concentration changes **amplify** orbitally-induced climate changes on glacial/inter-glacial time-scales. Changes during the present inter-glacial (until the start of the anthropogenic CO2 rise) have been small by comparison. Although complete **explanations for these changes** in the past **are lacking,** … . Reference deleted, bold added, TAR, ¶3.3.4, p. 203.

[*where in IPCC parlance, amplify is synonymous with positive feedback:*

> Feedback processes amplify (a positive feedback) or reduce (a negative feedback) changes in response to an initial perturbation and hence are very important for accurate simulation of the evolution of climate. TAR, TS, pp. 46-47.
>
> The various feedbacks in the climate system may amplify (positive feedbacks), or diminish (negative feedbacks) the original response. TAR, ¶7.1, p. 421.

[*IPCC had concluded that "a feedback between the carbon cycle and the climate system **could** produce substantial effects on climate." Bold added, AR4, ¶7.6, p. 565. For the future it said, "Climate models **will** have to reproduce accurately the important process and feedback mechanisms". Bold added,* id.*, p. 567. At present its models parameterize clouds, meaning they produce clouds with statistics instead of with dynamic feedback. AR4, Ch. 7, Executive Summary, p. 502. IPCC uses these parameterizations in the most comprehensive climate models, the AOGCMs, but the method is unreliable, "the primary reason why climate projections differ between AOGCMs." AR4, Box TS.8, p. 67.*

[***The Acquittal** contributes evidence and a model where IPCC found its model lacking. The Vostok results fit a model in which CO2 arises as a positive feedback from water in accordance with the Henry's Law, which represents the physics of solubility.*

> 3) There has never been an independent event causing CO2 to rise before temperature, until now. And it's rising a lot.

[*RSJ: Volcanoes do what Luke denies.*]

> 4) Temperature now is beginning to rise as would be predicted from CO2-GHG models.

[*RSJ: IPCC jiggers its models to make it so. First, it zeros out the background rising temperature and CO2 at model initialization. This is the equilibrium assumption for year 1750. What it canceled was an on-going surge in these parameters. This surge was likely due to the lag caused by the relative heat capacities of the ocean layers and of the surroundings. IPCC models don't use heat capacity, so it just erased the reservoir of heat and CO2 being discharged into the atmosphere in 1750.*

[*That surge would have increased surface temperature by another 2ºC to 4ºC if the present warm state were just to match the previous four interglacial maxima. IPCC zeroed the natural rise in CO2, and attributed the continued rise to man. Then it predicted a 3.5ºC rise from a doubling of CO2, a number small enough to be feasible, and large enough to alarm the public. This model is scientifically challenged.*

[*Luke impliedly urges that because the models match the on-going rise they are somehow validated. The models instead were manufactured, artificially set by IPCC to match the on-going rise. Furthermore, the models don't replicate the essential CO2 feedback which IPCC says they "will have to reproduce."*]

> Anyway, back to the essay. It's kind of amusing that he refers to this as the "discovery" that the ocean solubility caused CO2 cycles. There's already mounds of scientific studies done on the ocean's interaction with climate, and he does a simple excel data fit and thinks he's discovered a new, simpler mechanism? This reminds me of "skeptics" who "discover" that the grand canyon was made by the biblical flood, or that quantum physics is wrong and electrons are just spinning discs of charge (www.commonsensescience.org)

[*RSJ: The essay does not say what Luke claimed. In the paleo record, the CO2 cycles because the temperature cycles. Solubility causes CO2 to follow temperature, but does not cause any cycling.*

[*Here's a challenge for Luke: find in IPCC reports how it mechanizes the CO2 content of the atmosphere based on temperature and solubility. Answer: it's not there.*]

> He states with absolutely no evidence: "Since there is no difference between manmade and natural CO2, anthropogenic CO2 is sure to meet the same fate." But manmade CO2 is being released at a much higher rate than any natural CO2 ever has, and by all current climate models, the natural CO2 sinks cannot keep up with it, and it *will* accumulate, and in fact already *is*.

[*RSJ: Actually, there is no difference at the molecular level, but measurements show a difference in the distributions of the various isotopes of carbon attributed to natural and anthropogenic CO2. In the context of the paper, however, no isotopic difference in solubility*

is known to exist. Such a relationship can be established à priori based on mechanics, but it would appear to be a distant effect compared to the first order effect of temperature and the second order effect of salinity. Should such a mechanism prove to be true, water would have a weak but surprising fractionating effect, preferring one isotope over another in the dissolution process.

[*Luke says, "manmade CO2 is being released at a much higher rate than any natural CO2 ever has". According to IPCC, ACO2 is being emitted at about 6 Gtons/year and natural CO2 at the rate of about 90 Gtons/year from the ocean and about another 120 Gtons/year from the land. Luke's conclusion about the accumulation is as false as his physics.*]

> Finally, the piece ends with a bunch of unsupported straw-man attacks and misrepresentations against climate modelling that's so dense that it's really not worth attempting to counter every half-hearted "skeptical" claim that's stuck in there (The word "forcing" appearing in the titles means GCMs are invalid? What the hell? Does Glassman even know what a climate forcing *is*? Look it up on Wikipedia, man!) Here he writes another fabricated story, this time of how climate scientists destroyed perfectly good GCMs in desperate attempts to prove AGW and exclude contradicting data. Right. Glassman apparently thinks his audience is too dumb to come to their own conclusions, so he warns you that the three papers he cites are "rocket science" and then shoves his conclusions down your throat as if they're fact. I really need to see some hard evidence before I buy that there are *no* GCMs in use today that ignore the ocean, as he claims. In fact, I would wager that most of the things he says that climatologists "need" to do -- they're **already** doing.
>
> Original posted by: Luke at March 26, 2007 09:24 AM

[*RSJ: Luke complains that he can't counter every claim in the article's ending, so he counters none. This does indicate that in fact his accusation is as empty as his set of counterexamples.*

[*The question is not what some GCMs might have done, or what any of them are doing today. The question is what the GCMs were doing that contributed to the 3.5°C average climate sensitivity IPCC calculated for its Third and Fourth Assessment Reports to create and announce to the world the coming AGW catastrophe. No one has a dialog with IPCC. It has no live presence on the Net. It just throws reports over the wall.*

[*GCMs are intrinsically invalid, meaning they do not comport with the physics of processes on the globe. For a recent condensation, see Rocket Scientist's Journal,* ***Fatal Errors in IPCC's Global Climate Models****.*

[*Wikipedia is not the problem; IPCC and its evangelists like Luke are. IPCC predicts global catastrophe and provides reports to the public as its proof. Luke should not just read IPCC scripture, but rely on it as precedence over all other information except physics.*]

Posted by Luke | April 5, 2009 11:11 AM

John, Channel Isles wrote:

> Hi Dr G,

Luke sounds a bit of an Ozzie 'wanker' a term used widely in the Anglo-sphere. Given his predilection for misrepresentation seen in his blog maybe he was one foe the Australian alarmists that were accused of hacking down trees from the shoreline in the Maldives as they evidenced Al Gore and railway engineer, Dr. Pachauri, Chair of the IPCC, were talking absolute garbage about sea level and the islands (where I holiday) being under threat!

Anyway Luke brings up the issue of oceanic CO2 and there's a new early stages study which I'd like to pass on in case you haven't seen yet.

Apparently the Atlantic has declined as a holder of CO2 by some 50% according to Helmuth Thomas, professor of oceanography at Dalhousie University, who spent the last 2 years investigating the world's largest carbon sink.

> Link.
>
> http://www.sciencedaily.com/releases/2009/04/090408195557.htm

[*RSJ: Some observations on your 4/10/09 article, Thomas, H., et al.,* "Climate Change Leads To Major Decrease In Carbon Dioxide Storage"]

[*This is science for sale: online price -- $9. I have an aversion to reviewing science journalism and to relying on abstracts, but when that is all that has been made freely available to the public, that's is as far as science has gone on the subject. I estimated that a citizen would have to spend many tens of thousands of dollars to buy IPCC's bibliography, and IPCC reports are intended to influence the public!*

[*The abstract begins, "Observational studies report a rapid decline of ocean CO2 uptake in the temperate North Atlantic during the last decade. We analyze these findings using ocean physical-biological numerical simulations forced with interannually varying atmospheric conditions for the period 1979–2004." This seems to be a common symptom of the climate field, the acceptance of simulation for data. This verges on the bizarre.*

[*The* ***RSJ*** *paper* ***Fatal Errors in IPCC's Global Climate Models*** *exposes some of the problems in climate simulation. Someone should check whether Thomas, et al. have propagated these errors into their simulation. What follows suggests that they have done so.*

[*The press report says, "the 'carbon sink' in the North Atlantic is the primary gate for carbon dioxide (CO2) entering the global ocean and*

stores it for about 1500 years." This not in the abstract, so presumably it is a modeling assumption. My papers have outlined a circulation pattern that actually fits all the data, and it doesn't include storage in the North Atlantic. CO2 absorbed across the surface of the surface layer as the currents and winds head poleward feeds into the THC, where it is carried into the deep ocean and returned on average about 1100 years later, mostly in the Eastern Equatorial Pacific.

[*The press report says, "The oceans have removed nearly 30 per cent of anthropogenic (man-made) emissions over the last 250 years." If this is from the simulation, it makes* ***Fatal Error 6: IPCC errs to model different absorption rates for natural and manmade CO2 without justification.*** *IPCC data show approximately 100% of natural CO2 emitted from the land and the ocean reabsorbed annually by the land and the ocean. No reason has been given for only 30% of ACO2 to have been reabsorbed over centuries while 100% of natural is up loaded in one year. A reason is necessary because to the first and second order effects of solubility, temperature and salinity, water cannot discriminate between natural CO2 and ACO2.*

[*As I have written elsewhere, a hypothesis exists for the solubility constant to be dependent on isotopic weight, based on the fact that solubility is a mechanical phenomenon. On the data that the isotopic mix of natural CO2 is heavier than ACO2, a tertiary effect could be expected. It is presumably quite minute, and unlikely to be measurable except in a laboratory. If it exists, then the solubility process fractionates.*

[*The press release suggests that Thomas, et al., have not discovered what is revealed in the subject paper above,* ***The Acquittal of CO2****. That is, based on the Vostok data, atmospheric CO2 is imprinted with the pattern of the solubility of CO2 in water. The release says, the authors "weren't sure what was causing the decrease, whether it was man-made or natural reasons." "Sure" means certain, a hedge perhaps, but scientifically unrealizable so we'll take it to be casual speak. But with 210.2 GtC/yr circulating through the atmosphere from natural causes, and only 6.4 GtC/yr currently from ACO2 (AR4, Figure 7.3, p. 315), the authors should be looking first to the primary natural cause, ocean surface layer temperature. This must be the first order effect in their simulation, and should be validated if they were to make measurements.*

[*The article quotes Thomas as saying, "This research is the foundation for research in ocean acidification which has implications on marine life and corals". The IPCC derives its conjecture about acidification from the equilibrium concentration of ions and molecules in the surface ocean as functions of pH, Bjerrum plot, circa 1914. Zeebe, R.E., and D. Wolf-Gladrow,* CO2 in Seawater: Equilibrium, Kinetics, Isotopes. *Elsevier Oceanography Series 65, Elsevier, Amsterdam, 2001, Figure 1.1.2:* Carbonate system, p. 5; cited in AR4, §7.3.4.1 Overview of the Ocean Carbon Cycle*, p. 527, without reference to the Bjerrum plot. Under this conjecture, changes in CO2 concentration would shift the pH operating point down (more acidic) provided the surface layer were in equilibrium. This is* ***Fatal Error 3: IPCC errs to model the surface layer of the ocean in equilibrium.*** *On about a dozen counts, the surface layer is not in equilibrium. It is highly dynamic, both thermally and mechanically, circulated, filled with entrained air and marine life, roiling, and undulating. The surface layer is best modeled as a reservoir for molecular CO2 to satisfy Henry's Law of solubility with the atmosphere, and to feed the sequestration and circulation patterns in the deeper ocean layers, but as certain as possible in science, not in equilibrium.*

[*The press piece says,*

> These natural phenomenons [sic] have the potential to mask the effects of anthropogenic climate change."

[*and*

> We have to understand these to assess how anthropogenic climate change is affecting them.

[*This is not the usual journal article, which must provide the obligatory and perfunctory recognition of the standard model for climate, AGW. Thomas, et al. are tiptoeing up to a precipice. The journal Global Biogeochemical Cycles deserves special recognition for carrying their paper.*]

Caught the article on the cheekily titled 'Antigreen' website (never fails to make me chuckle:) with a very good cross-analysis by Richard S. Courtney who also supports the idea our recent atmospheric CO2 levels are oceanic in origin and not man-made. He also berates Thomas for his liberal use of AGW labels being attached to a possible cause of the Atlantic's change.

Antigreen (article posted Sat. 11th April, 2009) http://antigreen.blogspot.com/

[*RSJ: The link also bears the cute title, "Greenie Watch". It quotes Courtney as saying,*

> These findings are consistent with my view - repeatedly stated - that the recent rise in atmospheric carbon dioxide concentration is a result of natural variation to the chemical composition of the ocean surface layer. In my view the carbon cycle is constantly seeking equilibrium, and I strongly assert that the IPCC uses a model of the carbon cycle that is wrong because it assumes the carbon cycle acts like a simple plumbing system that has fixed 'sources', 'sinks' and flows. The findings of Thomas et al. support my view and are yet more strong evidence that the IPCC model is wrong.

[*Apparently Courtney, too, has yet to discover the imprint of solubility on atmospheric CO2.*

[*To say that anything "is constantly seeking equilibrium" is a tautology, and a bit anthropomorphized, a fact of which we must be most sensitive in the AGW arena.*

[*Actually, models with fixed sources, sinks, and flows are quite acceptable. These factors are the basis for thermodynamic models for the climate, and for mass balance for atmospheric gases. They are important, although the climatologists disparage the first, categorizing such representations as "toy models", but then laud them as helpful. The mass balance model is essential to, but missing from, the AGW story. It shows how ACO2 emissions affect the atmospheric concentration, and help uncover the unsupported 30%/100% assumption.*

The thermodynamic heat model works where the GCMs do not, and it has great potential to produce dynamic results where the GCMs cannot.

[*Thanks for the citations.*]

Posted by John, Channel Isles | April 11, 2009 4:13 AM

John, Channel Isles wrote:

Hi Dr G,

My apologies I didn't pick up Prof. Thomas' study was an abstract and not an actual observational science study of the Atlantics current decline as a CO2 reservoir. Prof. Thomas' liberal use of AGW tags is speculative and as you say "Science for Sale" as it looks like he is seeking grant money to continue his study.

[*RSJ: No apologies needed, but thanks anyway. My intent in the "science for sale" remark was to complain about references, or more generally scientific papers, not freely available to the public. The academic and government communities operate cloistered.*

[*With regard to grants, let me recommend Donald W. Miller, MD, The Trouble With Government Grants", 5/16/07, posted at*

http://www.lewrockwell.com/miller/miller23.html

[*(thanks to Evan Sinicin). Miller reports on the state of grant awards in the health and science fields by the US federal government. Starting in 1946, clearing applications for these awards was the responsibility Research Grants Office. It later became the Center for Scientific Review (CSR) under the National Institutes for Health, plus 25 more US federal granting agencies. The NIH awards total $28 billion per year. Miller doesn't provide the grand total budget.*

[*Miller discusses six "paradigms in the biomedical and climate sciences that have achieved the status of dogma". One of them is AGW. Miller has much to say about peer review (it "enforces state-sanctioned paradigms") and climate and IPCC. With regard to climate, he says in part,*

> In 21st century America, consensus and computer models masquerade as science. They supplant experimental data. As Corcoran (2006) puts it, "Science has been stripped of its basis in experiment, knowledge, reason and the scientific method and made subject to the consensus created by politics and bureaucrats." Reduced to a belief system, a majority of scientists and groups like the Intergovernmental Panel on Climate Change can declare, without having to provide scientific evidence, that they believe humans cause global warming. This alone makes the hypothesis become an established fact and received knowledge (Barnes, 1990). Peer review compounds the problem. It competes with objective evidence as proof of truth.
>
> Computer models purporting to make sense of complex data, particularly with regard to climate change, have replaced the scientific goal of supplanting complicated hypotheses with simpler ones (Pollack, 2005). Researchers offer computer models as evidence for global warming. When unsound assumptions and faulty data render one model unreliable, other improved ones are constructed to justify the state's desire to promulgate this "truth," which it can use to exert greater control over the economy and technological progress.

[*Heretofore, I had considered peer-review only in the context of professional journalism, and had not considered its role in federal grants. The peer-review process is a failure in both domains. It serves stasis and convention, not science.*]

I have emailed Mr. Courtney, who cross-examined the Thomas study, regards his opinion, "in my view the carbon cycle is constantly seeking equilibrium". The solubility of CO2 in water which is determined by temperature and is not "seeking equilibrium". It does what it does depending on the temperature over any particular spot of the ocean surely?

[*RSJ: Clarification couldn't hurt my previous remarks. Equilibrium is by definition a state in which any system will, in time, reside. By not anthropomorphizing, I meant not implying that natural systems have goals or a will to change in any direction. According to thermodynamics, heat dissipates, entropy increases, and an isolated system sinks to a locally lowest energy state.*

[*With regard to Earth climate, the primary parameter of interest is the global average surface temperature (GAST), one of several macroparameters which are not directly measurable. The fate of carbon in the atmosphere and its role in the GAST depends on its circulation path as it winds through the atmosphere and across the sea surface, being absorbed according to the sea surface temperature along the way. However, at the ends of the path, in the high latitudes, the last of the CO2 to be dissolved is finally absorbed in the coldest part of the ocean where solubility is maximum. In this model, the distribution of SST and local SSTs become relatively unimportant. What are important are the SST at outgassing and nearest the poles, the latter being relatively constant near 0ºC until the ice caps disappear, and the former causing positive feedback. That feedback is strong in a carbon cycle model, but weak, even negligible, in a global temperature model.*]

Did you also notice below the 'Atlantic/CO2' article another entitled 'The Medieval Warm Period Rediscovered'? Contained therein are two articles but the second, published in Science by Brierley, et al., addresses the Pliocene warm interval, a period of warm climate conditions that preceded the current Pleistocene Ice Age. Occurring some 4 million years ago a period much warmer than today.

[*RSJ: Missed that and those. Links to the Brierley paper led me to an abstract, and the opportunity to buy the full paper for $15.*]

The Brierley article states "Our reconstruction shows that the meridional temperature gradient between the equator and subtropics

was greatly reduced, implying a vast poleward expansion of the ocean tropical warm pool. ... Ultimately, sustaining a climate state with weak tropical sea surface temperature gradients may require additional mechanisms of ocean heat uptake (such as enhanced ocean vertical mixing)."

[*RSJ: Abstract, actually. The sentence preceding your quote is,*

> We reconstructed the latitudinal distribution of sea surface temperature around 4 million years ago, during the early Pliocene.

[*Then they concluded the part about possibly requiring modeling of ocean heat uptake.*

[*Climate models so far promoted by IPCC, and my own using heat as a flow variable, are static. GCMs are made pseudo dynamic by driving them with an emissions scenario, but they compute GAST steady-state-point by steady-state-point. A long term objective for models is to assess the dynamically changing GAST, and this requires representation of the heat capacities of the various storage elements. Heat capacities can be estimated through measurements of heat storage, which is what Brierley, et al., also determined their model might require. Fortunately for today's static models, the heat capacity of the ocean is large enough for it to be modeled successfully as a heat source at an average, effective SST.*

[*As far as sea surface temperature gradients are concerned, they will prove to have a low order effect on estimating GAST. Global averages, not gradients, are necessary to answer the thermodynamic question, which, as is the defining nature of thermodynamics, involves macroparameters.*]

The study has major implications for understanding ocean/atmospheric science and in particular climate models used by the IPCC (i.e., rendering them inaccurate, incomplete and not up to the job of predicting future climatic conditions).

[*RSJ: This might not be the case. The eight examples in the* ***Fatal Errors in IPCC's Global Climate Models*** *summarize the gross IPCC problems discovered thus far, and without reaching the level of detail of SST gradients.*]

Greenie Watch concludes, "If the Holocene truly marks the end of the Pleistocene Ice Age and a return to the conditions that prevailed during the Pliocene, parking your SUV and buying carbon credits won't do a thing to stop it. [¶] On the bright side, ocean temperatures were much warmer then and distributed differently than today, so climate change still has a way to go before real global warming kicks in."

Personally after a year and half of research on the AGW I've learned which scientists to trust and which talk with fawked tongues! And I believe we're in for a slight cooling over the next 20 yrs so I'm moving southward (Mediterranean) in a couple of years to avoid the chill!

[*RSJ: Finding neither merit nor utility in any abundance in GCMs, my concept of the climate today relies on a qualitative extrapolation of the 450 kyr Vostok record, with reservations because it is referenced to the Antarctic. The obvious feature is the set of five nearly equal temperature maxima, rather unevenly spaced, with rapid warming (about 1.2ºC/millennium) and slow cooling (about -0.50ºC/millennium. The five maxima and the four encompassed, nearly equal minima are about 3ºC and -9ºC, respectively.*

[*The present warm state is unique among the five. It is broad, averaging about 0ºC ± 1ºC over about 11 kyrs. Previous highs lasted about one sample interval of 1.46 kyrs. However, if Earth reaches those previous highs, Earth will warm about 3ºC more, and then retrace slowly toward another glacial minimum, all from natural causes. [Rev. 4/15/09.]*

[*The rise and fall of the Vostok temperature record are transient effects, which dictate that future modeling includes heat capacities.*

[*The natural climate effect extrapolated from Vostok data, whether a valid model or not by itself, constitutes a background effect which IPCC wrongly discards. As modeled conceptually, it is in part an on-going release of heat from the ocean. This is* ***Fatal Error 2: IPCC errs to discard on-going natural processes at initialization.***

[*Find a climatologist and see if he is moving. What happens with such things as temperature over the next 20 years is called weather, which appears not to have advanced a bit faster than the state of the art in measurements. GCMs are as useless over eons as they are over a week. In IPCC's world, neither ice ages, the most significant figures, nor weather, the least significant figures, are predictable. Its models are good only in the middle significant figures.*

[*Expurgating your fawked tongues lament a bit, IPCC disciples don't even share a forked tongue. It's a trident.*]

Posted by John, Channel Isles | April 11, 2009 3:04 PM

John, Channel Isles wrote:

Dr. G,

Thank you for the link regards the politicisation of science grants and be assured it's as bad in Britain where climate research grants through the Hadley Centre require expressions of belief in AGW at interview stage. Indeed, supporting or underlining the political policy of the day has been a long standing requirement of all Gov't consultancy work and 'independent research' through the decades, and we shouldn't be the least bit surprised climate science has been 'bent' to fit the political purposes of the day.

[*RSJ: The public is victim of a cabal.*]

And there's the rub. Road engineers can argue speed limits are useless, smokers that the science on passive smoking is BS and scientists can argue until they're blue in the face with the hardest of evidence (Vostok alone kills AGW, to name but 1 of many fatal facts) and the Gov't will not take a blind bit of notice and keep seeking to have its tax and control policies underwritten by cronies on their payroll (disgusting but reality).

As I've said before the death of AGW must be organised in the (only) arena in which it exists, namely the political arena. Organised and killed by the only force that can kill a political belief system and that being another opposing political belief system.

So the death of AGW will not be by scientific methods even if the science provides much of the ammunition. AGW is based on socialism not science and the anti-industry, anti-consumer and anti-capitalist enviro movement (lots of negatives, no upsides, all bit depressing!). So only the return of capitalist parties to political power will defeat the AGW movement because the nature of the beast is it is socialist in thought and deed.

And I believe, in Britain and America at least, that's most definitely coming as citizens reject anymore Gov't debt and indeed reject this socialist State 'tax and control' AGW forces on our lives. These socialists (FOX TV News commentators like Glenn Beck and Sean Hannity now call them "fascists" and they ain't far off, quite frankly) need to fabricate something that appears to have legitimacy just as they'd use consultants in the past. AGW is the best fit by a considerable margin and indeed provides the greatest ratchet socialism has ever devised (what a wonderful opportunity to bugger up everything?) AGW tax (fraud) and AGW control (socialists contempt for peoples freedom and indeed democracy) over our energy use, our movement (cars, holidays) and even our food (hit the Jackpot!).

Indeed railway engineer Dr. Pachauri, Chair of the IPCC, on top of calling for people to move from cars to public transport (trains presumably!) has also called for less meat eating as sheep and cattle herds account for "more greenhouse gas emissions than the entire transport sector" he claims. But Gerrit van der Lingen, a geologist/paleoclimatologist, claims cattle and sheep are in fact net sinks of carbon not net emitters.

http://www.climatescience.org.nz/images/PDFs/ruminantsnotkyotovillains.pdf

The article in the above link shows how animals burping and farting may emit methane but through their eating of plants they are in effect sequestrating carbon as a balance. And he points out how Dr. Pachauri may not get a single carbon credit for all his vegetarian ways as his homeland India not only has not signed up to Kyoto but also has 800 million sacred cows burping and farting with very divine blessing.

I've no evidence except assumption but the implication of Dr. Lingen's and other studies is that humans themselves must be a net sink of carbon, too (2 teaspoons of C maybe but there's 4.3bn of us). Indeed population growth (another grotesque and inhuman enviro obsession) rather than producing more CO2 could actually provide a greater sink of Earths naturally increasing CO2 levels as we grow and need more plants and animals all of which sequester more CO2.

[*RSJ: As I recall, IPCC omits human bodily emissions in its reckoning of CO2 or CH4, anthropogenic or natural.*]

Maybe the IPCC could have website advise on which meats, fruits and salads are highest in CO2 with the lowest burping/farting ratios per lb?

Dr. Lingen says so long as we don't incinerate our dead animals (or ourselves) then burial (on land or at sea) should 'seal the deal' on locking up carbon. So railway engineer Dr. Pachauri will be pleased humanity is locking up carbon by expanding population, eating more meat and vedge and not having to cull sacred cows to save his hide.

NB. Worth noting the UN's Human Resources Dept. really found the skill set required (i.e., a railway engineer) for the job of Chairing the IPCC (on climate) with their usual remarkable competency!

Yes again to the GCMs being bent to provide a Gov't information stream of computer simulations to complete the picture of 'science' being conducted (CO2 has been 'done to death' scientifically speaking) and predicting on cue to news deadlines every month of the doom they need to save us from.

And the poor GCMs have been kept on maximum hot air output settings throughout this remarkably chilled-out winter as heavy snow storms fell across China, Europe and America. The predictions of frying churned out on cue and fed to the leftie media has bordered on absolute desperation, bless them! The BBC's brilliant science correspondent was caught 'warming up' Obama's inauguration speech while another BBC journo was caught using an 'expert' he claimed (on geology) to interpret and predict weather patterns from UK Hadley GCMs. This suggests they've run out of both real science completely and also cronies to peddle this garbage.

I can also report faithfully the British Gov't whilst talking the talk is not walking the walk. A climate committee member has said precisely that and says their Gov't has not delivered any money (i.e., they're bankrupt). It may also be a sign that BP and Shell have recently both wound down their UK and European solar panel factories.

My unscientific mind still does not understand why Mr. Courtney talks about equilibrium and you say, "Equilibrium is by definition a state in which any system will, in time, reside".

To my simple mind anything (matter, life form etc) that is in a state of equilibrium or balance is in a state of being dead. I understand a state of exhaustion but surely the solubility of CO2 requires an unbalanced state (of something) to work and only ends when that unbalanced state is finished, which is not the same as seeking an equilibrium!

[*RSJ: Even death is not enough for equilibrium, which in the climate sense is not a teeter-totter balance, but thermodynamic equilibrium. It is not reached until all decay has stopped. Equilibrium is highly theoretical, but at the same time a quite useful concept in*

approximation. Henry's Law covering solubility is defined for equilibrium, but in the Real World, dissolution and outgassing is perpetually ongoing into and out of all exposed liquid water.

[*My little criticism about anthropomorphizing is with the word "seeking", as if the gas had a mind of its own in order to look for something. Solubility is a mechanical process where the molecules are stirred and given a momentum by their temperature, which is also a mechanical process.*]

As example an ice cream melts in the sun. Is the ice-cream 'seeking out equilibrium' (a state of balance) or is it merely reacting (changing) its state due to temperature from one to another. The molecules break their binds as ice and form liquid. Once it has melted it has 'spent itself' and reached another state (liquid) as a result of an energy transfer which I do not understand to be the same as seeking out some state of balance! Is 'spent' the same word as 'equilibrium' in science talk?

[*RSJ: Ice cream's slow moving molecules collide with high speed molecules of the warmer surface, and so gain momentum like billiard balls struck by faster ones. Where this happens enough and the warmer surface is warm enough, the ice cream will soon enough change state from solid to liquid, locally at first and then totally.*

[*I've not heard the word "spent" used in this sense, and it's probably not a good fit. As the name implies, equilibrium is about striking a balance, not going to a zero energy state. Think of a pair of ice cream scoops, one much colder than the other, but the pair perfectly insulated from any thing else. The two will reach an equilibrium at the same temperature, but will remain solids.*]

Finally you say your "concept of the climate today relies on a qualitative extrapolation of the 450 kyr Vostok record". It would be far easier to predict future climate based on simple readings (charts) of previous weather patterns with possibles and probables from those patterns charting forward. Surely the IPCC are on a hiding to nothing even trying to build something as complex as a computer simulation rather than using something far simpler like line drawings on a piece of paper using even traces over previous weather patterns? The climate system is massively complex even if its boundaries (temperature fluctuations etc) are relatively small?

[*RSJ: Science models can be quite scale dependent. Think of the physics of solids. At the microscopic scale, quantum mechanics applies. At a mesoscale, Newtonian mechanics hold. At cosmic scales, general relativity rules. Physicists can barely connect these pairwise, and connecting the three is a Holy Grail of physics today. In climatology, we have microscopic phenomena, as in condensation around hygroscopic nuclei. At the mesoscale we have weather, barely predictable a week in advance. And at the macroscale, we have the mysterious climate. These are far from being successfully bridged pairwise.*

[*Different models exist at different scales because patterns discovered in nature at one scale are not significantly correlated with patterns discovered at other scales. No one would expect paleo climate patterns or events to yield a model with predictive power about cloud condensation on aerosol particles. IPCC reports suggest that the Panel expects the reverse to hold, however. It expects to model climate starting with clouds condensing on sulfate aerosols.*

[*Weather and climate get confused everyday. Weather is the noise that rides on top of the climate, or, conversely, climate is the extremely long term trend of the weather. Either way, the parameters of importance confound because just to add they must have common units, as in degrees Celsius. But the global average surface temperature, GAST, is not the same parameter as the temperature this week in Denver, just to pick a regional point at a starkly different elevation, and one especially dependent on local phenomena.*

[*If every hour or every week we knew the global average surface temperature, it would be relatively useless for all those things we want to know from weather reports – how to dress, whether to put out to sea, whether to batten down for a storm, whether to plant or to harvest. Just because GAST and today's high are measured in ºC, don't expect one to inform much about the other.*

[*Phenomena at the different scales have different spectra. Radiation energy exchanges, like solar heating and cosmic ray ionization, occur on a scale in the nanoseconds to microseconds. Water vapor phenomena, like condensation and dissolution, and heat exchanges, like ice cream melting and mercury thermometers, respond first in milliseconds because they involve mechanical collisions of molecules and microscopic particles. Weather is subject to phenomena that occur over an hour to a few days, like storm movement and weather fronts, for things linked to the rotation of Earth, like Coriolis and diurnal forces, ocean currents and trade winds. Seasonal variations in weather are linked to the tilt of Earth and its position in its annual orbit. Solar heating and solar winds are modulated by the 11-year solar cycle to produce a similar modulation on Earth's climate.*

[*Climate changes over geological time spans, known by coarse measurements and proxies, and from causes still to be discovered. Orbital mechanics and solar activity are correlated with climate. Ocean currents probably vary over geological time spans, and they are well-known to produce short but persistent events like ENSO. These phenomena are of the right time scale for climate, or close, but no one has created a model from them with predictive power. Especially not IPCC.*

[*When we measure one of the parameters for a particular scale, it always proves to be highly variable. An axiom of science is that every measurement has an error, whether that error lies in the measuring apparatus or in disturbances to the thing being measured. This noise produces a spectrum, a characteristic known by Fourier analysis. Mathematically this is a mere shifting of data from the time domain to the frequency domain, and the two methods properly done are equivalent and lossless. This representation of data is routine on microwave scales, as with light and now relatively familiar infrared absorption.*

[*The point of this lengthy exposition is that the scales are due to the structure and motion of the things around us, from subatomic particles, to atoms, to molecules, to clouds, to storms, to planets, to solar systems, to galaxies, to clumps of galaxies, and beyond. The phenomena associated with measurements from each have a corresponding spectrum confined to and variable within its scale. The fact that such measurements are known at all is a result of man's skill. We attempt to discover phenomena by improving measurements of effects to isolate causes, and from these postulate a cause and effect in a model. Between the scales, we find voids – gaps in the*

spectra associated with gaps in the kind of things that have structure and motion. The gaps in measurements are a result of refinements to discriminate between processes. However, all such things generally operate at once in nature, and to a great extent independently. Solar activity and orbital mechanics, for example, are independent.

[*For climate we have had little to choose between parables about wooly caterpillars and Poor Richard's Almanac, on the one hand, and GCMs, on the other. At least the former make predictions within the human life span. IPCC has developed no predictions at all short of the ultimate catastrophe, so its models are not scientifically trustworthy. The Vostok record allows us to make yet another prediction, but even this is challenged by the sampling period. The period between ice core samples averages 1,300 years, with no data for the most recent 2,300 years. But the almost periodic oscillation of temperature in the Vostok record between warm and cold extremes supports predictions of high and low limits for the climate, if not the precise timing, and likely warming and cooling rates.*

[*Predicting climate changes from weather records, or vice versa, is not yet the state of the art.*]

Posted by John, Channel Isles | April 12, 2009 8:22 PM

Richard S Courtney wrote:

[*RSJ: The following biography appears on the Internet over an invitation to "contact the expert by email":*

> Richard S. Courtney is an independent consultant on matters concerning energy and the environment. He is a technical advisor to several UK MPs and mostly-UK MEPs. He has been called as an expert witness by the UK Parliament's House of Commons Select Committee on Energy and also House of Lords Select Committee on the Environment. He is an expert peer reviewer for the Intergovernmental Panel on Climate Change and in November 1997 chaired the Plenary Session of the Climate Conference in Bonn. In June 2000 he was one of 15 scientists invited from around the world to give a briefing on climate change at the US Congress in Washington DC, and he then chaired one of the three briefing sessions. His achievements have been recognized by The UK's Royal Society for Arts and Commerce, PZZK (the management association of Poland's mining industry), and The British Association for the Advancement of Science. Having been the contributing technical editor of CoalTrans International, he is now on the editorial board of Energy & Environment. He is a founding member of the European Science and Environment Forum (ESEF).

http://www.globalwarmingheartland.com/expert.cfm?expertId=135

[*Source Watch adds,*

> Richard S. Courtney is a Technical Editor for *CoalTrans International* (journal of the international coal trading industry) who lives in Epsom, Surrey (UK). In the early 1990s Courtney was a Senior Material Scientist of the National Coal Board (also known as British Coal) and a Science and Technology spokesman of the British Association of Colliery Management.

http://www.sourcewatch.org/index.php?title=Richard_S._Courtney]

> Dear All:
>
> It would seem sensible for me to state my own views here.

The normal model of the carbon cycle assumes the system behaves like a simple plumbing system with fixed inputs, outputs and flows. This assumption enables 'carbon budgets' of the kind used by the IPCC. But I do not agree that 'plumbing model' because it fails to match the anthropogenic emissions to the rise in atmospheric carbon dioxide concentration.

[*RSJ: Let me be the first to join you in rejecting the plumbing model. I say the first because a search of the Internet for "'normal model' AND 'carbon cycle'" produced no relevant hits. If such a thing as "THE normal model of the carbon cycle" existed, one would expect not one but multiple hits. So I will presume to take your rejection one step further by suggesting that no such model exists at all. This is in part a recognition of the complex, nonlinear physics required to describe the carbon cycle with fidelity. The "simple plumbing system" notion seems quite naive. It is certainly not the model used by IPCC, and as has been said often on this blog, no source is worth challenging except IPCC.*

[*Wuebbles and Jain published a background paper on IPCC's carbon cycle model. Wuebbles, D.J., and A.K. Jain,* "Carbon Cycle Modeling Calculations for the IPCC"*, UCRL-JC-115337, August 12, 1993. It says as the introduction,*

> A newly developed globally averaged carbon cycle model has been used to estimate emissions and concentrations of CO2 for required IPCC scenarios. The model consists of four reservoirs: atmosphere, biosphere, mixed layer of the ocean, and the deep ocean. The atmosphere and mixed layers are considered as well-mixed reservoirs. However, the deep ocean is treated as advective-diffusive medium with a continuous distribution of total inorganic carbon as described by one-dimensional conservation-of mass equation (Hoffert et al., 1981). The upwelling diffusion (UD) ocean includes the polar sea box which closes the thermohaline circulation. In our UD model the physical transport processes are characterized by eddy diffusivity K and upwelling velocity w. To the model deep ocean an additional carbon source term is added that is associated with the oxidation of the organic debris containing the carbon removed in the mixed layer by photosynthesis. The dynamic ocean model parameters - the eddy diffusivity K, upwelling velocity w, and atmosphere-ocean exchange coefficient, k_{am} (or the corresponding gas exchange rate) - are determined by the calibration method based on matching the natural as well as bomb-produced 14C. The estimated values of K, w and k_{am} are 4700 m^2/yr, 3.5 m/yr, and 0.13 per yr (or the corresponding gas exchange rate 17.8

> mol/m^2/yr), respectively (Table 1).
>
> The ocean buffer factor that summarizes the chemical re-equilibration of sea water with respect to CO2 variations is calculated from the set of chemical equations of borate, silicate, phosphate, and carbonate chemistry and the temperature-dependent rate constants as given by Peng et a1.(1987).
>
> There is an important feedback for the atmospheric CO2, namely, the direct interaction of atmospheric CO2 with the deep ocean which is nearly free of excess CO2. We have taken this feedback into account by introducing a polar sea feedback parameter, π_C, defined as the change in the surface concentration in the polar region relative to that in the non-polar region. This parameter is similar to that used by IPCC in their energy balance model to represent the variation of polar sea temperature. The value of π_C would lie between 0.0 and 1.0. For π_C = 0.4, the model estimated average CO2 uptake rate for the period 1980-1989 is 2.1 GtC/yr which is in good agreement with the IPCC estimates of 2.0 ± 0.8 GtC/yr. Therefore, we have used π_C= 0.4 in our model calculations.
>
> For estimating the terrestrial biospheric fluxes, a six-box globally aggregated terrestrial biosphere submodel coupled to the atmosphere box has been used. The six boxes are ground vegetation, non woody tree parts, woody tree parts, detritus, mobile soil (turn over time 75 years), resistant soil (turnover time 500 years). The model equations that describe the rate of change of carbon in each boxes are those taken from Harvey(1989). The photosynthesis rate in the submodel is simulated by increasing carbon dioxide concentrations in the atmosphere by logarithmic law and a fertilization factor β = 0.42. **The flow coefficients are temperature dependent** according to an Arrhenius law. A one-dimensional upwelling-diffusion model of Harvey and Schneider (1985) is used to infer the surface temperature change and oceanic uptake of heat. Bold added.

[*For what IPCC adapted of this for its model, see AR4, ¶3.6.1* Terrestrial and Ocean Biogeochemistry Models*, pp. 213-214, and the ensuing sections. For illustrations, see AR4, Figure 3.1, pp. 188-189. It gives no evidence in any of its Reports that it included temperature dependence.*

[*The IPCC model is highly complex and far from any kind of "plumbing model". IPCC goes so far as to add unreal processes in order to make ACO2 accumulate in the atmosphere as it would wish, and omits the key process of solubility, which frustrates that accumulation. The unreal processes are the Revelle factor (see AR4, ¶7.3.4.2* Carbon Cycle Feedbacks to Changes in Atmospheric Carbon Dioxide*, pp. 531-532) and the assumption of equilibrium in the surface layer (*id.*, ¶7.3.4.1,* id.*, Box 7.3:* Marine Carbon Chemistry and Ocean Acidification*, and especially IPCC's source as published online, Zeebe, R.E. and D. Wolf-Gladrow,* "CO2 in Seawater: Equilibrium, Kinetics, Isotopes"*, 6/24/06, CARBOOCEAN Summerschool.) Zeebe, et al., show that IPCC's equations in Box 7.3 are for equilibrium, and show in a figure at p. 58 of 66 omitted by IPCC (IPCC included the companion figure at p. 59 of 66 as Figure 7.11(a)) that the hypothesized Revelle factor follows the solubility curve. The omitted figure had been Figure 7.11(b) in a draft, but was dropped. IPCC all but eliminates solubility, providing no discussion of Henry's Law or Henry's coefficients. Solubility doesn't go away, but reappears in IPCC's scenario as an unwanted Revelle factor dependence on temperature, which IPCC conceals.*

[*Mr. Courtney rejects the "plumbing model" for failing to match ACO2 to the rise in atmospheric CO2. No physical reason exists for ACO2 emissions to match the rise in atmospheric CO2. In fact, under Henry's Law, ACO2 should be absorbed in surface water at the same rate as natural CO2. That holds for the first and second order effects of temperature and salinity, respectively. Even IPCC admits that only about half of ACO2 emissions remain in the atmosphere, and much of its elaborate carbon cycle model is designed to prove that conjecture notwithstanding Henry's Law.*]

The IPCC uses 5-year smoothing of the data to force a fit between the annual anthropogenic emissions and the observed recent rise in atmospheric carbon dioxide (CO2) concentration. Some smoothing of annual data is justifiable. Some nations may account their 'year' from different start months so 2-year smoothing is justifiable. And some emissions from a year may get accounted in an adjacent year, so 3-year smoothing may be reasonable. But the IPCC uses 5-year smoothing because they fail to get a fit with 2-year, 3-year and 4-year smoothings.

[*RSJ: IPCC provides a graph of ACO2 emissions from 1970 through 2005 in AR4, Figure 2.3 (b), p. 138, attributed to a CDIAC report. The data agree, and neither CDIAC nor IPCC mentions any smoothing.*

[*But IPCC does indeed manipulate data to make sources agree. An example is in Figure 2.3 where the isotopic ratio of 13C/12C is graphed by shifting and scaling to give it the appearance that it correlates with ACO2 emissions. From this manipulation, IPCC concludes*

> Measurements of both the 13C/12C ratio in atmospheric CO2 and atmospheric O2 levels are valuable tools used to determine the distribution of fossil-fuel derived CO2 among the active carbon reservoirs, as discussed in Section 7.3. In Figure 2.3, recent measurements in both hemispheres are shown to emphasize the strong linkages between atmospheric CO2 increases, … and the 13C/12C ratio of atmospheric CO2. AR4, ¶2.3.1 Atmospheric Carbon Dioxide, p. 139.

[*That "strong linkage" is a fiction manufactured by improper graphing. IPCC fails to provide a mass balance analysis to establish the linkage it seeks.*

[*Mr. Courtney provides no reference for his claims that IPCC manipulated its smoothing filter to make data records agree. That has not been validated in IPCC Third or Fourth Assessment Reports.*]

However, as one of our 2005 papers demonstrated, the annual anthropogenic emissions can be fitted to the observed rise in atmospheric carbon dioxide concentration (without use of any 'fiddle factor' such as the 5-year smoothing used by the IPCC) if it is

assumed that the system is constantly seeking equilibrium. Using that assumption, it can be shown that any one of several possible causes may each be responsible for the observed rise. My paper to Heartland-1 explained this and says,

[*RSJ: Fitting ACO2 to atmospheric CO2 rises is not difficult; it is just erroneous. ACO2 enters the atmosphere to mix with natural CO2, where it enters the rivers of CO2 that spiral about the globe through the atmosphere and the ocean surface layer. The mixture dissolves upon contact with terrestrial water, mostly leaf water, and is soon returned at the same temperature, and dissolves progressively on contact with the ocean, finally at about 0ºC, where it is primarily returned in one millennium at tropical temperatures. A small addition as from ACO2 causes an increase in the three dynamic reservoirs, but it is trivial and proportional in the ratio of the emissions to the total capacity of the reservoirs. ACO2 is emitted at 6.4 GtC/yr into the three active reservoirs of atmosphere at 762 GtC, the surface layer of the ocean at 918 GtC, and terrestrial water at 2,260 GtC (plus 270 GtC/yr attributed to leaf water exchange). See AR4, Figure 7.3, p. 515, and TAR, ¶3.2.2.1, p. 191. Excluding the leaf water, ACO2 is currently adding 0.16% per year to the active reservoirs. ACO2 does not accumulate in the atmosphere, notwithstanding models created to show the contrary.*

[*Smoothing is nothing more than filtering, and it is not obnoxious when used to reduce noise, especially for portrayal of data for human consumption. However, using filtered data in measuring correlation is erroneous. It creates false correlations where none existed, so it can be a source of artifacts in data reduction. No such error has been discovered in IPCC data reductions.*]

"This presentation considers mechanisms in the carbon cycle and uses the model studies of Rörsch, Courtney & Thoenes (2005) (4) to determine if natural (i.e. non-anthropogenic) factors may be significant contributors to the observed rise to the atmospheric CO2 concentration. These considerations indicate that any one of three natural mechanisms in the carbon cycle alone could be used to account for the observed rise. The study provides six such models with three of them assuming a significant anthropogenic contribution to the cause and the other three assuming no significant anthropogenic contribution to the cause. Each of the models matches the available empirical data without use of any 'fiddle-factor' such as the '5-year smoothing' the UN Intergovernmental Panel on Climate Change (IPCC) uses to get its model to agree with the empirical data. So, if one of the six models of this paper is adopted then there is a 5:1 probability that the choice is wrong. And other models are probably also possible. And the six models each give a different indication of future atmospheric CO2 concentration for the same future anthropogenic emission of carbon dioxide."

Clearly, in this circumstance I am not willing to say with certainty what is the cause of the cause of recent rise in atmospheric carbon dioxide concentration. But this begs the question as to what is my opinion of the most likely cause. A decade has passed since Calder showed that alterations to atmospheric CO2 concentration correlate to variations of mean global temperature, and several others have since found the same (Ahlbeck has a paper in process of publication that shows the same using data up to the present). But the variations in atmospheric CO2 concentration are around a base trend of ~1.5 ppmv of increasing atmospheric CO2 concentration. At issue is the cause of that base trend which has been observed at Mauna Loa since 1958.

[*RSJ: This paper, **The Acquittal of CO2**, to which Mr. Courtney is posting his comment, confirms the correlation between CO2 and global average surface temperature (GAST) from the Vostok record, and confirms what others have reported -- that CO2 lags GAST. CO2 is a positive feedback to temperature. The correlation is real, but as further revealed here, CO2 concentration follows the complement of the solubility curve.*

[*Calder is not referenced in IPCC's Third or Fourth Assessment Report.*

[*The trend in Mauna Loa retains some mystery. Contrary to IPCC claims, and even contradicted by IPCC, CO2 is neither well-mixed nor long-lived in the atmosphere. CO2 gradients exist around the globe, and dissolution and outgassing per Henry's Law are instantaneous compared to weather and climate time constants. Mauna Loa sits in the plume of the Eastern Equatorial Pacific outgassing, which is on the order of 15 times as great as ACO2 emissions. That plume will intensify as the climate warms, and will shift with changing weather patterns. The bulge in CO2 concentration at MLO is likely due to global warming and a shifting of MLO's location relative to the outgassing plume. IPCC does not include these two effects of the positive feedback of CO2 and the outgassing plume in its carbon cycle model.*]

I think the cause of the recent rise in atmospheric carbon dioxide concentration is a result of a change to the solution equilibrium of carbon dioxide between air and ocean. This change exists: it has been measured as a change to ocean surface layer pH.

[*RSJ: Mr. Courtney likely makes reference here to the conjecture that added CO2 in the atmosphere acidifies the ocean. IPCC supports this conjecture with the chemistry of equilibrium as reported by Zeebe and Wolf-Gladrow, who demonstrate the effect using the Bjerrum plot. That diagram portrays the acidification, which is a consequence of a shifting of the equilibrium operating point. In making its argument, IPCC implies that the surface layer is in equilibrium. It is not. This equilibrium assumption has the effect of causing the ocean to buffer against absorption of CO2. The surface layer is highly dynamic, mechanically, chemically, and thermally, which is contrary to any equilibrium assumption. Instead a probable model for the surface layer is that being in disequilibrium it is free and receptive to act as a reservoir for molecular CO2 to satisfy solubility reactions with the atmosphere and physical and chemical processes within the ocean, from the surface layer to the deep.*]

The recent rise in atmospheric carbon dioxide concentration is consistent with it being a change to the solution equilibrium as indicated by the magnitude of the measured change to ocean surface layer pH.

In my opinion, this change to the solution equilibrium results from altered biological activity in the ocean surface layer. (In fact, there must be a change in the biological activity when the pH changes, and vice versa.)

[*RSJ: Any acidification supported by measurements is unchallenged here. Equilibrium supports an acidification conjecture, but that equilibrium does not exist.*]

Furthermore, I think this change to the biological activity results from variations in growth-limiting nutrients in the upwelling water from deep ocean.

Several experiments (one very recently) show:

(1) Biological activity in the ocean surface layer is very sensitive to small changes in amounts of growth-limiting trace compounds (notably Fe, K and P).

(2) Increased provision of these compounds initially increases phytoplankton growth with resulting sequestration of CO2 from the air, but this sequestration is short term as the ecological balance adjusts to the altered provision of trace compounds.

[*RSJ: The reservoir of molecular CO2 in the surface layer has the effect of decoupling atmospheric CO2 concentration and sequestration processes. IPCC erroneously moves that reservoir into the atmosphere to account for the MLO bulge but violating Henry's Law, taking CO2 out of the surface layer to leave it in a preposterous state of equilibrium.*]

The new ecological balance (induced by variations in growth-limiting nutrients in the upwelling water) could be expected to provide an altered pH to the ocean surface layer. Biological activity is greatest and the pH is lowest (i.e. so-called 'ocean acidification' is greatest) in regions of the ocean surface layer where there is upwelling from deep ocean (i.e., where the THC delivers dissolved trace compounds to the ocean surface layer). The thermohaline circulation (THC) carries water to deep ocean, transports it around the globe for centuries, then returns it to the ocean surface layer. Its dissolved trace compounds alter as a result of all the conditions it meets on its travel around the globe.

[*RSJ: Yes, but the bulk of the THC return is in the Eastern Equatorial Pacific. This theory is validated in part by the graphs of Takahashi. See for example AR4, Figure 7.8, p. 523.*]

(This is like a river flowing to the sea. The materials which the river delivers to the sea vary as a function of all the changes during the time the water in the river flowed to the sea.)

And very slight variation in the amounts of the compounds dissolved in the THC has very large effect on biological activity in the ocean surface layer when the THC delivers them to the surface layer.

[*RSJ: The surface layer feeds the THC at its headwaters near the poles. The THC appears to exhaust itself primarily in the Eastern Equatorial Pacific and a few other, minor points. Upwelling may be an independent circulation, or minor tributaries of the THC. Measurements of the CO2 content of upwelling would be informative.*]

There are several changes that would alter the significant amounts of minerals dissolved in the flow(s) of the THC. Variations in volcanism alone could easily provide the variations to dissolved minerals that would alter biological activity to produce the observed pH changes. But these variations in dissolved minerals are so very small that there is no possibility that they could be determined from available data for deep water chemistry of the flows around the THC. Altered pH of the ocean surface layer changes the solution equilibrium of carbon dioxide between air and ocean.

[*RSJ: The solution equilibrium of CO2 between ocean and air is given by Henry's Law and Henry's coefficient. At one atmosphere pressure, the latter is affected primarily by temperature, and secondarily by salinity. Any dependence it might have on acidity (pH) or isotopic weight is an informed hypothesis, but far from validated. These tertiary effects might be significant to climate, but until the first and second order effects are established as theory they can be safely ignored. As regards solubility affects on weather and climate, it is instantaneous, and the delicate issues of equilibrium are rather insignificant. To the extent that Mr. Courtney is talking about chemical equilibrium in the surface layer and its buffering and acidification effects, it does not exist.*]

This changed solution equilibrium alters the concentration of atmospheric carbon dioxide. Thus, in my opinion, the recent rise in atmospheric carbon dioxide concentration is a result of altered biological activity in the oceans which could be expected to result from minute variations in dissolved trace elements in water upwelling from deep ocean.

[*RSJ: The recent rise in CO2 concentration may be attributed to three effects. First is global warming, as extrapolated from the Vostok record and by judicious application of Henry's Law, notwithstanding that the surface of the ocean is never in equilibrium, and validated by the fact that the CO2 concentration follows the complement of the solubility curve. Second is recognition of the lie of MLO in the plume of the oceanic outgassing, coupled with the facts that CO2 is neither well-mixed nor long-lived, plus the fact that that plume and the wind conditions at MLO have neither been recorded nor modeled. Third is the addition of ACO2 which adds 0.16% per year to each of the three active reservoirs.*]

According to this hypothesis, the recent rise of concentration of atmospheric carbon dioxide is not caused by changes to 'sources' and 'sinks': it is a result of an altered equilibrium.

The hypothesis is consistent with findings of Roy Spencer (changes to atmospheric carbon isotope ratios), Tom Quirk (variations of atmospheric carbon isotope ratios with latitude) and Ernst Back (rapid rise and fall of atmospheric carbon dioxide concentration in the 1940s). So, could the hypothesis (explained above) be falsified? Yes, the point to be determined is the variation in the growth-limiting trace compounds in the upwelling water from deep ocean.

[*RSJ: Mr. Courtney's conjecture is falsified by two of the errors committed by IPCC: (1) recognition that no equilibrium exists in these reservoirs, and (2) failure first to discount the positive feedback to temperature of dissolved CO2. Any source of CO2 concentration or acidification not included in the model will per force be attributed to the other sources remaining in the model.*]

Improved data of deep ocean chemical content would be a method to falsify my hypothesis. Measurement of Fe, K and P

concentrations in water soon to upwell to ocean surface would provide predictions of future atmospheric carbon dioxide concentration according to the hypothesis. Such prediction would be a proof if accurate and a disproof if inaccurate.

All the best

Richard

Posted by Richard S Courtney | April 13, 2009 2:58 AM

John, Channel Isles wrote:

Hi Dr G,

I've had a reply from Richard Courtney regards his cross-examination of the Thomas, 'Atlantic declining as a CO2 sink' study. I put to Richard that CO2 in water is determined by temperature and is not "seeking equilibrium" but he replied;

[*RSJ: On 4/13/09, Mr. Courtney commented here as well, which now appears on the blog with a full response. These appear to have crossed with the speed of light.*]

"No. The temperature equilibrium has small effect and only alters the variation around the trend (of ~1.5 ppmv per year) in atmospheric carbon dioxide concentration (as recorded at Mauna Loa since 1958). The major change to the solution equilibrium between air and ocean is induced by altered alkalinity of the ocean surface layer (n.b. not temperature).

[*RSJ: I don't know what Mr. Courtney means by "the temperature equilibrium". I don't believe it exists anywhere, especially where it might be significant to climate. The temperature at Vostok, derived from the deuterium and oxygen isotopic content, almost always has a trend between its extremes, as far as it can be resolved. The CO2 concentration at Vostok should be low compared to the rest of the globe because it sits in a CO2 sink, and remarkably lower than MLO which should be a global maximum, sitting as it does in the primary plume of oceanic outgassing. However, we have no similar biasing phenomenon reported for the temperature record, making the Vostok temperature record global. Consequently, the MLO CO2 record should be more sensitive to temperature than are the ice core data.*

[*Mr. Courtney's figure of 1.5 ppm/yr at MLO is correct, and that is about 100 times the peak to peak rate at Vostok. The data are not directly comparable, however, because the MLO data span about 50 years, while the Vostok data span about 8 to 15 millennia, from minimum to maximum CO2. A span of 50 years is not resolvable in the Vostok record, for which the sample interval is about 1.46 millennia.*

[*The chances of detecting one sample from an event like the MLO record (around 310 to 385 ppm lasting for just 50 years) at Vostok is about 3%. IPCC concludes from these data that MLO concentrations are unprecedented in 420,000 years, placing no confidence band on its conclusion. TAR, p. 185.*

[*I have responded to his "solution equilibrium" at length to his 4/13/08 post. For the reasons given there, I find Mr. Courtney's model invalid.*]

Dr Glassman's assertion that I have "yet to discover the imprint of solubility on atmospheric CO2" is so obscure that I do not understand it. And his statements saying, "To say that anything 'is constantly seeking equilibrium' is a tautology, and a bit anthropomorphized" are not worthy of comment.

[*RSJ: This is repeated in the response to Mr. Courtney's 4/13/09 post. Perhaps rephrasing the comment will help. The concentration of CO2 in the Vostok record follows the complement of the solubility curve as it depends on the Vostok temperature. Consequently to model the carbon cycle, the natural CO2 concentration should be a consequence of outgassing from surface waters, and primarily from the ocean. If that is not the modeler's choice, then an elaborate mechanism will have to be devised to shape the CO2 as if it had come from the ocean.*

[*Why do you suppose Mr. Courtney found the little instruction about equilibrium and anthropomorphized process are not worthy of comment? They arise out of his writing that "the carbon cycle is constantly seeking equilibrium". The carbon cycle is not seeking anything. It has neither will nor preferences, and no sense of comfort. The Second Law of Thermodynamics dictates that every system, left to itself, evolves to maximum entropy, which occurs at equilibrium.*

[*The remainder of your text appears to be identically Mr. Courtney's 4/13/09 comments.*]

Posted by John, Channel Isles | April 14, 2009 3:44 PM

Richard S Courtney wrote:

Dear Dr Glassman:

I am replying to your comments on my posting here.

There is real difficulty in determination of cause and effect in almost all aspects of the AGW hypothesis. So-called 'ocean acidification' is one example of it. The observed reduction to ocean alkalinity is often ascribed as being a result of increased atmospheric

CO2 concentration. However, I am suggesting the opposite: i.e., I am suggesting that the observed reduction to ocean alkalinity is the cause of increased atmospheric CO2 concentration.

[*RSJ: First let me join with you in doubting the origins of ocean acidification. But without reading beyond this point, my skepticism is in full alert. The outgassing of CO2 from the ocean is massive and continuous. You seem on the one hand to promise here to show how that outgassing is not mechanical, but instead is biochemical, and that I am not at all prepared to accept. On the other hand, you may be saying that you have discovered that biochemical processes in the ocean contribute CO2 to the atmosphere, and this I wouldn't doubt except to wonder how you might detect your novel source against the background of the massive outgassing. I'll read on.*]

The fact that greatest reduction to the alkalinity is at sites of ocean upwelling strongly supports my suggestion.

Also, the observed magnitude of the change to the alkalinity is consistent with my suggestion. This magnitude is determined by both measurement (i.e., field studies) and models. Unusually, Wiki gives a good starting point for investigation of this because it provides a list of references with links to useful papers at

http://en.wikipedia.org/wiki/Ocean_acidification#cite_note-orr05-1

Using those links to access the listed papers shows surprising agreement between the field studies and the model results for change to ocean pH, but it should be remembered that the pro-AGW selection and culling of data on Wiki would ensure that the list does show such agreement.

I said;

"The normal model of the carbon cycle assumes the system behaves like a simple plumbing system with fixed inputs, outputs and flows. This assumption enables 'carbon budgets' of the kind used by the IPCC."

And – for convenience – I called the IPCC model of the carbon cycle a 'plumbing model'.

You dispute my calling the IPCC model a 'plumbing model' because you can find no reference to it having been given that title. So what? My description is accurate. Indeed, the inherent errors of the estimates of flows between parts of the carbon cycle are larger than the annual anthropogenic emission and, therefore, no carbon budgets could be conducted if the IPCC did not model the system as I described.

[*RSJ: I wasn't quibbling about your descriptor "plumbing model". My concern was your characterizing IPCC's model as having "fixed inputs, outputs and flows". The descriptions of the IPCC model, one produced for IPCC I quoted at length, and the other from IPCC reports, are anything but fixed in any sense. They are ocean chemistry dependent and originally at least were temperature dependent.*]

In your response to my comments saying:

"However, as one of our 2005 papers demonstrated, the annual anthropogenic emissions can be fitted to the observed rise in atmospheric carbon dioxide concentration (without use of any 'fiddle factor' such as the 5-year smoothing used by the IPCC) if it is assumed that the system is constantly seeking equilibrium. Using that assumption, it can be shown that any one of several possible causes may each be responsible for the observed rise."

You assert:

"The recent rise in CO2 concentration may be attributed to three effects. First is global warming, as extrapolated from the Vostok record and by judicious application of Henry's Law, notwithstanding that the surface of the ocean is never in equilibrium, and validated by the fact that the CO2 concentration follows the complement of the solubility curve. Second is recognition of the lie of MLO in the plume of the oceanic outgassing, coupled with the facts that CO2 is neither well-mixed nor long-lived, plus the fact that that plume and the wind conditions at MLO have neither been recorded nor modeled. Third is the addition of ACO2 which adds 0.16% per year to each of the three active reservoirs."

Indeed, the rise may be attributed to that, but there is no more reason to accept your attribution than any other attribution which also fits the data.

[*RSJ: Agreed.*]

Importantly, I do not agree "the addition of ACO2 which adds 0.16% per year to each of the three active reservoirs". The system does not 'know' where an emitted CO2 molecule originated and there are several CO2 flows in and out of the atmosphere that are much larger than the human emission. The total CO2 flow into the atmosphere is at least 156.5 GtC/year with 150 Gt of this being from natural origin and 6.5 Gt from human origin. So, on the average, about 2% of all emissions accumulate.

[*RSJ: I provided the present content of the three active reservoirs from IPCC Figure 7.3, and an ACO2 emission rate of 6.4 GtC/yr. The three reservoirs total 3,940 GtC, so 6.4 divided by 3,940 is 0.16% per year. With what do you disagree?*

[*You say "the total CO2 flow into the atmosphere is at least 156.5 GtC/year". IPCC gives the total as 218.2 GtC/yr. Summing data in AR4 Figure 7.3 p. 515. So your statement is mathematically correct, but why to you cite the smaller figure? Are you disagreeing with IPCC data?*

[*From the figures you cite, you conclude something about how much CO2 accumulates in the atmosphere. What accumulates is what can be shown as an increase in the atmosphere. For that you need the total in the atmosphere, before and after, or the net of flows in and out. But you only give a new number for what flows in. Your conclusion cannot be reached without data reflecting the change in the*

total in the atmosphere.]

[*I agree that no part of the carbon cycle knows the origin of CO2, except for the second order and probably negligible effects associated with fractionating. IPCC doesn't agree. Its Figure 7.3 in AR4 has 190.2 Gt/yr of natural Carbon both in and out of the atmosphere, but ACO2 goes in to the atmosphere at 28.0 GtC/yr and out at 24.8 GtC/yr, a net accumulation. What are the processes by which IPCC determines that natural CO2 remains constant in the atmosphere, while ACO2 accumulates? IPCC doesn't even discuss solubility, wherein a remote possibility might exist to account for the carbon cycle discrimination between natural and anthropogenic sources.*

[*This discrepancy is truly bizarre. How did it not get challenged in the review process?*]

In other words, your argument is circular. You provide a model, assert that according to your model the anthropogenic emission "adds 0.16% per year to each of the three active reservoirs", and then claim that shows my statement is incorrect. However, your argument only shows you have constructed a model which fits the data, but our paper constructed six such models and said other models are probably also possible.

[*RSJ: You have not used circularity in any way with which I am familiar. Your next three observations are all correct: I did provide my own model, I did calculate the 0.16% figure, and I did say that your model is falsified, which I assume is what you mean by "[your] statement is incorrect." These were stated in the order you list, but they do not follow logically from first to the last as you suggest.*

[*You wrote of your model, "Altered pH of the ocean surface layer changes the solution equilibrium of carbon dioxide between air and ocean. [¶] This changed solution equilibrium alters the concentration of atmospheric carbon dioxide." By solution you could referring to dissolution, hence to solubility. If so, then your first sentence would mean, and would be better expressed to say, that Henry's constant is pH dependent. I could not contradict that possibility. It would be a novel discovery and a nice addition to the science. In the second sentence, though, by solution you seem to be referring to the place where pH changes, that is, in the mixture (solution) constituting ocean water, at the surface or at the depth from which upwelling occurs. I read the pair of sentences as a reference to the sea water solution, and I disagree that it exists in equilibrium. IPCC's model is invalidated and your theory is invalidated by the assumption of equilibrium*.]

And you dispute my conjecture that the observed reduction to ocean alkalinity is the cause of increased atmospheric CO2 concentration when you write:

"Mr. Courtney's conjecture is falsified by two of the errors committed by IPCC: (1) recognition that no equilibrium exists in these reservoirs, and (2) failure first to discount the positive feedback to temperature of dissolved CO2. Any source of CO2 concentration or acidification not included in the model will per force be attributed to the other sources remaining in the model.]"

But both of your points are false.

Of course "no equilibrium exists in these reservoirs" because – as I said – the system is constantly seeking equilibrium. As our paper said:

"Each model indicates that the calculated CO2 concentration for the equilibrium state in each year is considerably above the observed values. This demonstrates that each model indicates there is a considerable time lag required to reach the equilibrium state when there is no accumulation of CO2 in the atmosphere. In other words, one has to reckon with a considerable time lag to reach the equilibrium state Fa = 0 when Fin increases to a certain value with increasing Fem. As Figure 2 shows, the short term sequestration processes can easily adapt to sequester the anthropogenic emission in a year. But, according to these models, the total emission of that year affects the equilibrium state of the entire system. Some processes of the system are very slow with rate constants of years and decades. Hence, the system takes decades to fully adjust to the new equilibrium. And Figure 6 shows the models predicting the atmospheric CO2 concentration slowly rising in response to the changing equilibrium condition that is shown in Figure 7."

[*RSJ: Thank you for the copy of your paper. I will read it*.]

(Also, arm waving that my use of the word "seeking" equilibrium is "anthropomorphic" is not helpful; perhaps you would have preferred the more correct technical term "hunting" equilibrium?)

[*RSJ: My skepticism over AGW arose from IPCC's breach of the prerequisites of science. They demand precision in the use of language. In biology, for example, one finds text that gives a direction to evolution toward the betterment of the species, implying both a sense of superiority or inferiority and the sense of a will or motivation. Neither implication is scientifically acceptable. So, too, we cannot say that the carbon cycle or some part of it possesses in any sense a goal. The system can in no part want equilibrium, nor desire it, nor seek it, nor hunt for it. The process is brainless. It is an object for the Second Law of Thermodynamics by which it will devolve to maximum entropy and equilibrium. As I said, it was a minor point, but it did relate to what appeared to be a mistaken concept of equilibrium, and one featured in IPCC's climate model*.]

There is no "failure first to discount the positive feedback to temperature of dissolved CO2". I cited Calder's work of a decade ago and Ahlbeck's work that is in process of publication.

[*RSJ: Good. I expect to find in your paper how you have handled the positive feedback to temperature of dissolved CO2*.]

And you completely ignore the point of my conjecture when you write,

"Any source of CO2 concentration or acidification not included in the model will per force be attributed to the other sources remaining in the model".

No! It will not.

[*RSJ: IPCC initializes its models for year 1750 in a state of equilibrium. It's own data from Vostok show that in 1750 the climate was near a maximum in growth rate for global temperature and local CO2 concentration. This was undoubtedly due to the ongoing release of heat and CO2 stored in the ocean. IPCC simply declared the system to be in equilibrium at that point. Then IPCC and its followers analyzed the measurements of temperature and CO2 from around the globe and deduced that because it occurred in the industrial era, and because that involved accelerating emissions of CO2, that the cause of the temperature and CO2 rise must be anthropogenic. But as the Vostok records show, some parts of the two increases were ongoing or background processes. IPCC did not separate the natural rises from the anthropogenic, but simply attributed all the increases to man.*

[*What I sense in your model is a parallel to IPCC's initialization error. CO2 is pouring into the atmosphere in massive proportions, and your model must account for it or work around it, but not neglect it. Also the CO2 you theorize is associated with acidification needs to be shaped by the solubility curve. I'll look for that in your paper.*]

You clearly fail to understand the significance of altered pH of the ocean surface layer on the solution equilibrium of CO2 between air and ocean.

As a start in understanding this significance I recommend reading

Jacobson, M. Z. (2005). "Studying ocean acidification with conservative, stable numerical schemes for nonequilibrium air-ocean exchange and ocean equilibrium chemistry". Journal of Geophysical Research - Atmospheres 110: D07302. doi:10.1029/2004JD005220. ISSN 0148-0227

[*RSJ: I have learned not to look for Journal of Geophysical Research articles. They are rarely available for free, and this one is no exception at $9. There are thousands and thousands of such articles for sale at $9 and up into the hundreds of dollars. And when one buys such articles, he is buying a non-refundable pig in a poke. I have purchased more than my share of articles only to find they are worthless.*

[*According to the abstract of Jacobson (2005), his model is driven by a combination of historic CO2 and acidification records, plus a global warming scenario for increased CO2 to 2104. He predicts a future growth in acidification from 8.14 in 2004 to 7.85 in 2100. He then discusses the processes involved in this increase and their dire consequences. This appears to be just another article in the lexicon of the global warming catastrophe with no model to support its anthropogenic nature. This follows the logic that if you don't buy my model, I'll make the consequences even worse.*

[*Judging by the abstract, Jacobson (2005) does not illuminate the reason you recommended it. He uses various computer models to calculate a decline in pH for a prescribed rise in atmospheric CO2, which I must assume is what you mean by "solution equilibrium of CO2 between air and ocean". In other words, his model cause is an increase in ACO2 emissions, and its effect is a decline in pH. As I understand your model, it postulates as its cause a decline in pH, and its effect is a rise in CO2.*

[*You speak of the "significance of altered pH". In Jacobson's model, the significance is to the ecosystems in a century. In your model, the significance is to a rise in CO2 levels. You are correct that I clearly fail to understand the significance as you see it.*

[*Also, while M. Z. Jacobson is often cited by IPCC, it referenced none of his papers from 2005. Instead, I would refer you again to the freely available, online article by Zeebe and Wolf-Gladrow, authorities on whom IPCC does rely and cites prominently for its understanding of equilibrium. I operate on the basis that the only thing worth debunking in AGW is the work of IPCC. The organization comes to its conclusion of a catastrophe from certain models based on the evidence it presents, so we need not reference unrelated work. Jacobson is supportive of that IPCC model, starting with an approved CO2 emissions scenario and ending in more destruction, and so adds nothing. There would be no crisis from the fraud but for the weight of the UN organization.*]

All the best

Richard

Posted by Richard S Courtney | April 16, 2009 1:55 AM

Richard S Courtney wrote:

Dear Dr Glassman:

I shall be overseas for a month and must discontinue our discussion until I return. I regret this because it seems there may be valuable benefits obtained from our continuing interaction.

Others can assess the merits of our arguments to date for themselves. But, while writing this apology for exiting the debate, I take the opportunity to respond to a couple of your points.

You are correct in the tenor of your remarks concerning both Jacobson (2005) and the 'spin' put on it by the IPCC. However, it does clearly explain the relationships of ocean carbonate chemistry, ocean pH and the solution equilibrium of carbon dioxide between atmosphere and ocean. I stand by my recommendation of it for that explanation.

[*RSJ: You have added here a most important factor to our discussion. IPCC provides equations for the surface layer carbonate chemistry as its equations 7.1 and 7.2. AR4,* Box 7.3: Marine Carbon Chemistry and Ocean Acidification*, p. 528. Both equations depict*

two reactions, and equation 7.2 is the same as equation 7.1 with an extra carbonate ion added to each expression (the left hand side, the middle, and, equivalently, the right hand side). It says,

> The air-sea exchange of CO2 is determined largely by the air-sea gradient in pCO2 between atmosphere and ocean. Equilibration of surface ocean and atmosphere occurs on a time scale of roughly one year. Gas exchange rates increase with wind speed (Wanninkhof and McGillis, 1999; Nightingale et al., 2000) and depend on other factors such as precipitation, heat flux, sea ice and surfactants. The magnitudes and uncertainties in local gas exchange rates are maximal at high wind speeds. In contrast, the equilibrium values for partitioning of CO2 between air and seawater and associated seawater pH values are well established (Zeebe and Wolf-Gladrow, 2001[: *CO2 in Seawater: Equilibrium, Kinetics, Isotopes.* Elsevier Oceanography Series 65, Elsevier, Amsterdam, 346 pp., $101.]; see Box 7.3). AR4, ¶7.3.4.1 *Overview of the Ocean Carbon Cycle*, p. 528.

[*IPCC's first sentence, above, is a reference to solubility. See for example, Zeebe et al,* id*. Zeebe et al. provide an equation for this exchange, as "given by Henry's law".* Id.*, Equation 1.1.2, p. 2. It shows CO2(g) in equilibrium with CO2[(aq)] with a stoichiometric equilibrium constant, K0, identified as the solubility coefficient of CO2 in seawater. IPCC never identifies nor treats solubility and Henry's Law in its Third or Fourth Assessment Reports. It's indirect reference to solubility here relies on pressure, probably the least important aspect, being as it is approximately one atmosphere. IPCC does not recognize the dependence on temperature and, secondarily, salinity. Unlike pressure and salinity, the dependence on temperature creates an important positive feedback in the climate system.*

[*IPCC's second sentence is false because equilibration is never achieved. The absorption of CO2 into the ocean occurs all along the spiral paths of CO2 and surface water over the globe, and a reasonable assumption is that the sea surface CO2 concentration is approximately given by Henry's law, affected by the complex and unpredictable factors in IPCC's third sentence. Then IPCC's fourth sentence beginning "In contrast" appears to tie down the exchange by reference to and reliance on equilibrium carbonate chemistry. IPCC's contrast is not what it might appear to be.*

[*The dissolution of CO2 is far less complex than IPCC describes because what is of interest in climate is the global average, long term sea water absorption, integrated over its entire path of surface currents. Local winds, currents, temperature and pressure variations will contribute nothing significant to that global absorption. So in this sense, solubility is likely less complex than the processes of chemical equilibrium in the surface layer.*

[*In terms of thermodynamic equilibrium, the atmospheric-ocean exchange and surface water chemical equilibrium are on a par. Neither set of processes is ever in equilibrium.*

[*IPCC's equation 7.1 is an abbreviated form of Zeebe et al.'s triple reaction Equation 1.1.3.* Id.*, p. 2. As the authors say, these equations are for equilibria, which IPCC does not explicitly state. IPCC omitted the reaction with the carbonic acid molecule (H2CO3), replaced the double arrows of equilibria with single arrows to the right, creating nothing more than reactions implied by Zeebe et al.*

[*Zeebe et al. rewrite their Equation 1.1.3 to add stoichiometric equilibrium constants above each of their double arrows.* Id.*, p. 3. These are empirically determined constants, and they "depend on temperature T, pressure P, and salinity S".* Id*. They then define an equation for the total Dissolved Inorganic Carbon (DIC).* Id.*, Eq. 1.1.7. Next they derive three equations for the concentrations of CO2, and the ions HCO3- and CO3-- in terms of the two equilibrium constants and the parameter H+, the concentration of the hydrogen ion, known as pH.* Id.*, eqs. 1.1.9 – 1.1.11, respectively. They graph these three equations in a single diagram called the Bjerrum plot.* Id.*, Figure 1.1.2, p. 5. On this figure, the authors locate an* ***assumed*** *present Surface Seawater pH of 8.1.* Id. *They then state in the caption to the Figure 1.1.2,*

> Note that in seawater, the relative proportions of CO2, HCO3-, and CO3—control the pH and not vice versa as this plot might suggest (see text).

[*where they say in the text,*

> Because the Bjerrum plot (Figure 1.1.2) shows the concentrations of the carbonate species as a function of pH, one might be tempted to believe that the pH is controlling the concentrations and relative proportions of the carbonate species in the ocean. However, the reverse is true: the carbonate system is the natural buffer for the seawater pH.

[*Zeebe et al. provide no more evidence for their assertion that the pH is a dependent variable in the text than they did in the simple declaration of that fact in the figure caption. Regardless, their assertion may be accepted as fact, so long we recognize that the entire development of the equations for the ocean carbonate system applies only at equilibrium. The Bjerrum plot which provides the operating point of the carbonate system dependent, as the authors say, upon the concentration of CO2, only exists in equilibrium, and is only defined for valid stoichiometric equilibrium constants.*

[*IPCC writes,*

> Chemical buffering of anthropogenic CO2 is the quantitatively most important oceanic process acting as a carbon sink. … [¶] The ocean will become less alkaline (seawater pH will decrease) due to CO2 uptake from the atmosphere (see Box 7.3). The ocean's capacity to buffer increasing atmospheric CO2 will decline in the future as ocean surface pCO2 increases (Figure 7.11a). This anticipated change is certain, with potentially severe consequences. AR4, ¶7.3.4.2 Carbon Cycle Feedbacks to Changes in Atmospheric Carbon Dioxide, p. 531.

[*IPCC is simply wrong, and that is certain. That most important chemical buffering does not exist for want of equilibrium. The ocean is not a dead and stagnant body, nor is the atmosphere for that matter.*

[*IPCC shows its model of the atmosphere-ocean exchange as comprising three independent processes, the solubility pump (which it*

*also calls the "solution pump"), the organic carbon pump, and the CaCO3 counter pump. AR4, Figure 7.10, p. 530. It does not show in this diagram that it conveys upon the surface layer the ability to buffer against CO2 absorption. AR4, Box 7.3, p. 529; ¶*7.3.4.2 Carbon Cycle Feedbacks to Changes in Atmospheric Carbon Dioxide*, p. 531. That buffer action refers to a nonexistent state of equilibrium in the surface layer, so is false. With regard to the solubility pump, the diagram is relatively acceptable, but it should show a pool of molecular CO2 supplied by the solubility pump and feeding the organic carbon pump and the CaCO3 counter pump.*

[*Instead, IPCC connects the organic carbon pump and the CaCO3 counter pump directly to the atmosphere. (It also has reversed the connections to the atmosphere in the CaCO3 counter pump, which we may assume corrected.) These pumps indeed would emit CO2 to the atmosphere through upwelling as shown in Figure 7.10. However, the processes of photosynthesis with carbon consumption and of the production of calcareous shells with alkalinity consumption are most unlikely to draw CO2 directly from the atmosphere. These should draw upon carbonate ions in the surface layer. The surface layer appears not to be a buffer against absorption of CO2 from the atmosphere, but instead a buffer for ions to feed the various ocean processes.*

[*Furthermore, IPCC says,*

> It is important to note that ocean acidification is not a direct consequence of climate change but a consequence of fossil fuel CO2 emissions, which are the main driver of the anticipated climate change. AR4, Box 7.3, p. 529.

[*Setting aside for the moment the many reasons the IPCC's AGW model is wrong (see* ***IPCC's Fatal Errors*** *in the Journal), it here implies that the acidification process can discriminate between fossil fuel and natural CO2 emissions, or that natural CO2 is not a variable. Both implications are false. Moreover, IPCC draws its conclusion without reference to the equilibrium point or the Bjerrum plot which illustrates it.*]

Please note that Arthur Rorsch was lead author of our paper which I cited. He is a biologist and I defer to his knowledge of that subject. He accepts my conjecture as being reasonable (please note that this is not an argument based on authority but is the reasonable assumption that I should trust a colleague's knowledge of his specialism until given evidence that his knowledge is in error).

[*RSJ: When you return from your trip, please check with Rorsch and in the Jacobson (2005) paper to see if they relied on the equilibrium equations for the ocean pH, in Rorsch's case as a cause of CO2 release, and in Jacobson's case as an effect from excess CO2 emissions.*]

Importantly, I strongly agree with you that the IPCC's interpretation of the carbon cycle is plain wrong and not only for the reason you state. However, there is a difference between saying one thing is wrong and asserting another is right.

[*RSJ: I agree. However, I am quite satisfied to prove IPCC wrong. I am not pointed in the direction of developing a theory for the climate. Those will abound in the by-and-by.*]

I do not know the cause of the recent rise in atmospheric carbon dioxide concentration. You and I are each suggesting that the thermohaline circulation plays a significant role. One of us may be completely right, both of us may be partly right, or both of us may be completely wrong. It is a pity that I must now withdraw (at least for some time) from our discussion because I think our interaction could be useful to my learning.

[*RSJ: Agreed.*]

All the best

Richard

Posted by Richard S Courtney | April 17, 2009 6:58 AM

John, Channel Isles wrote:

Dr G and Richard,

Very interesting discussion which I'm on my 4th read through to try to grasp! I will post my 'Joe Public' thoughts on your discussion I hope sometime tomorrow to ask you to clarify some concepts in layman's terms (liberal use of ice cream and billiard balls as descriptions much appreciated for the non-scientific).

But I have two 'quickies' to ask. Richard finishes his post (6.58am 17th April) with "I do not know the cause of the recent rise in atmospheric carbon dioxide concentration."

Clearly Dr G's paper 'The Acquittal of CO2' provides that very answer. The Acquittal links for the first time the Vostok ice-core record with the solubility curve of CO2 in water and indeed the ocean circulation and indeed explains the 800 year lag of peak CO2 to Earth's previous temperature peak.

So what explains today's high CO2 is 'easy peasy' surely? 800 years ago we enjoyed the medieval Warm Period which some 300 scientists maintain was 2 to 3 Degrees warmer than today.

Surely the Vostok data plots a graph we can use to what the Medieval Warm Periods 2-3 Degree extra warmth will do to the CO2 atmospheric curve give or take say 20-50ppm accuracy?

[*RSJ: The rate of rise in CO2 at Vostok is about one percent of the rate seen at Mauna Loa. The rationale for the difference is affected by the following. (a) Vostok sits in a CO2 sink and MLO in the plume from the major source of atmospheric CO2. (b) The plume might be wandering and thus modulating MLO data. (c) ACO2 emissions do not account for the difference, especially without some new law of physics to discriminate natural CO2 and ACO2 emissions. These factors involve a handful of omissions, modeling errors, and erroneous conclusions made by IPCC, plus data not recorded.*

[*Your observation about the Medieval Warm Period seems to be confused with CO2 concentration, which brings the discussion to a second point. The temperature at Vostok does not suffer like CO2 for being inside a sink. The temperature is calculated from isotopic concentrations of oxygen (18O/16O) and hydrogen (deuterium), which are more global in nature. That temperature reached four nearly equal maxima within the last 450,000 years before the present warm era. That provides a model that predicts the current warm spell has a couple of degrees Celsius to go from natural causes. Those natural processes, which IPCC arbitrarily terminated in the initialization of its models, predictably continue, and that warming and CO2 increase manifest themselves in measurements in the industrial era. They constitute a natural background, which IPCC arbitrarily zeroed as an initial condition. IPCC then attributes to man what it threw away.*

[*Climate modeling is a tough scientific challenge. IPCC is far from achieving even a reasonable model, yet has used what it did produce to create a monumental, global political disruption. The solution to this master problem of climatology is not at hand, but it need not be developed to show that IPCC has committed scientific fraud. See in particular* ***IPCC's Fatal Errors*** *on the* ***RSJ****.*]

Secondly Richard writes, "The observed reduction to ocean alkalinity is often ascribed as being a result of increased atmospheric CO2 concentration. ... The fact that greatest reduction to the alkalinity (of the ocean) is at sites of ocean up-welling strongly supports my suggestion". Dr G you did not comment on this?

[*RSJ: Only indirectly for lack of data and a reference, and a bit for lack of relevance. IPCC accounts for acidification using invalid equilibrium equations, and those equations and the underlying assumption have far broader but equally erroneous impacts than just acidification. These impacts include the conclusion in your first sentence about what is often ascribed to increased CO2.*

[*IPCC does show CO2 emissions associated with up-welling and with an undefined "alkalinity release", but with no quantification. AR4, Figure 7.10, p. 530. But in my experience, up-welling occurs randomly around the ocean. While CO2 emissions are dominantly and consistently from the Eastern Equatorial Pacific. See for example AR4, Figure 7.8, p. 523.*

[*IPCC does discuss the CaCO3 Counter Pump with quantification. AR4, ¶7.3.4.2* Carbon Cycle Feedbacks to Changes in Atmospheric Carbon Dioxide*, p. 531. However in doing so, IPCC connects this pump to molecular CO2 in the atmosphere instead of to carbonate ions in the surface layer. Then it attributes the biochemical rates to the exchange instead of the nearly instantaneous solubility effect. IPCC's model is not credible.*

[*Mr. Courtney's model needs to be checked for two things. Did it use the same invalid equilibrium equations? The answer is likely to be "yes" since apparently no one has developed a disequilibrium model. Secondly, the release of CO2 by the ocean is almost certainly due to multiple mechanisms. The model needs to take into account the competing mechanisms, including undersea volcanic activity, biological acidification, and in particular the high concentration release due to the mechanical effects of the solubility pump.*]

Just to put my club foot through the door if we were to attach pink food colour to the deep ocean CO2 molecules as it up-welled and outgassed out of the surface ocean we would see a huge plume of pink CO2 molecules into the atmosphere. The ocean itself would 'lose pink' free from off-loaded CO2 and therefore be less acidic. Is that why Richard sees reduced alkalinity in areas of great upwelling?

[*RSJ: Physics has a nice paradigm called a thought experiment. I use it often, and have thought about the CO2 cycle in terms of various colors, too. What IPCC needs to do is develop a mass flow model for CO2 from all the colors, eliminating what it can show to be insignificant.*]

The other benefit of food colouring is that the huge plume of pink CO2 would give the IPCC's Mauna Loa, Hawaii, recording station some legitimacy in their recordings of knowing (having a clue) when the huge CO2 plumes outgassing from the nearby Pacific Ocean were hitting them full in the face from the trade winds or when the trade winds were taking it away from their white ivory tower up in the hills and therefore they were measuring more general atmospheric CO2.

[*RSJ: IPCC does not acknowledge the plume of outgassing. It does not record the wind at MLO along with the CO2. It imbues MLO data with legitimacy by falsely declaring atmospheric CO2 to be well-mixed, long-lived, and if anthropogenic, less soluble. IPCC does not want to explore any avenue of science that might frustrate its profitable and empowering conclusion that man is causing an irreversible, catastrophic increase in Earth's temperature. Academe, the professional journals, the granting agencies, and key politicians are all aligned with AGW. The ball is rolling.*]

Posted by John, Channel Isles | April 18, 2009 7:23 AM

John Port wrote:

It is staggering to parse through this commentary on nonsensical models when the facts are startlingly transparent:

[*RSJ: The staggering is apparent. While jp's kind of argument has no persuasive power, adjusting some of his facts might have value to his representative in Washington.*]

There is no evidence of APW- as laboriously admitted- CO2 lags warming ~800 years during every transition recorded;

[*RSJ: AGW, actually, and evidence for it actually exists, as thin and as contradictory as it is. Transition is a good word applied to the swings between cold and warm states in the paleo (Vostok) record and presumable from the geological record of the major ice ages and the proxy CO2 derivations. But CO2 doesn't exactly lag warming – it has a major component which does so. That component is relatively small compared to the total of atmospheric CO2 concentration, but it is nonetheless the largest, or nearly tied for the largest, component present in the CO2 signal. That is not troubling enough for the AGW believers, who concocted the amplifying model as a counterpoint – CO2 amplifies by causing the release of water vapor. Unfortunately, that doesn't cure lack of correlation problem. What leads in correlation may be a cause; what lags is not a cause, but may be an effect. What does neither is likely noise.*]

The planet has cooled since 1998- the cooling since '07 is the among the most dramatic temp changes recorded;

[*What is dramatic about the recent cooling is that it comes at a bad time politically for the AGW proponents. From a scientific standpoint, AGW is about climate, not weather. A trend in weather becomes a possible trend in climate when it has lasted for about three decades. This is something James E. Hansen, the most recognized believer, hasn't quite realized. For about 20 years he's been saying were a decade away from a "tipping point", a point of probability zero. We're at "t minus 10 years" and holding.*]

The entire "catastrophic escalation" of CO2 during 120 years of industrialized humanity is 1/100th of 1 percent= .028-.038. TRACE ELEMENT THEN and NOW! CO2 was 400% higher before fossil fuels???

[*IPCC projects a continuing rise in CO2 concentration, but admits that even that can't be made to cause enough warming in its GCMs. So it makes a little bit of CO2 causes a little bit of warming, and that triggers the release of water vapor. And then the water vapor causes the warming. This is the amplifier effect.*

[*The AGW folks have intentionally created an unstable model to prove its claims. What we find in nature is usually quite stable, barring the obvious like explosions and earthquakes. The trick in the science is to model the cause of the stability, the range of the regulating elements. Earth exhibits two stable states: a warm state like the present, which still might have a couple of degrees to go from natural causes, and a cold state, varying from the brief Little Ice Age, to the deep ice ages that lasted millions of years each. Man had nothing to do with those states then, and man has no power to do anything about them now, even accidentally. What stabilizes the climate in both states is albedo, a powerful, dynamic feedback. What counts is the hydrological cycle, not the carbon cycle. IPCC and the AGW folks have it quite wrong.*

[*Climatologists have discovered four times in the past 500 million years when the atmospheric CO2 content was about 20 times as great as the present.*]

32,000 scientists are now on record disputing AGW and demonstrating remarkable correlation between solar irradiance and earth temp- what a surprise.

[*RSJ: The IPCC and its AGW believers offer proof by consensus. It is first false, and second unscientific. It is as unsound an argument for the critics as it is for the proponents. Science is about models with predictive power. New models come one man at a time, validated by experiment, not by voting.*

[*Neither proponent nor critic would be surprised to find the correlation you claim exists. It does not exist. In the very brief records available, solar radiation has not varied enough to account for the temperature observations. Net solar radiation, meaning modulated by the Milankovitch cycle helps, but it produces some troubling mismatches, so remains an incomplete hypothesis.*]

Gore's crockumentary is well documented lies- his modeler is the global freezing buffoon from 1975.

The only question is why would any "scientist" stand silently while the poorest Americans are taxed thousands of dollars a year for this socialist fraud?

[*RSJ: While Gore obviously is not a scientist, he nonetheless answers your question. Rumors are that he has made hundreds of millions of dollars on AGW. Going green refers to greenbacks.*

[*Your question "why" must be rhetorical – it formulates the answer. Socialism is the ownership of the means of production and distribution by the government. It is not a state of being, but a continuous measure. Obama is leading the U.S. to a point of about 40% federal ownership of GDP, that is, 40% socialist. As he complete his conversion of this deep recession into a full blown depression, the private side of GDP will shrivel causing the socialist ratio will rise.*

[*Obama is wasting our wealth and power, and debasing the currency. He is doing and promising exactly the wrong things at every juncture – tightening credit regulations when he should be loosening them, letting the ratings fraud stand when he should be prosecuting it, forcing companies to build what few people want instead of what sells, subsidizing failed businesses instead of letting them go bankrupt, raising taxes when he should be cutting them, borrowing when he should be retiring debt. FDR took a decade to disprove Keynesian economics, i.e., that spending is the route to prosperity. The US and the world did not recover from the Great Depression until the federal government cut back on its massive spending, halved taxes, and released millions of people from its employ. That was post WWII.*

[*The problem is not a matter of your few thousands of dollars of annual taxes. It is a major collapse of our standard of living, with world wide humanitarian consequences through expanding totalitarian regimes and anarchy.*

[*Since World War II, the U.S. has created a major industry in research grants for basic science, and in contracts for military and communication for technology. The new forms take the shape of curing AGW and curing dependence on energy (not "foreign oil", but any oil, or coal, or natural gas). This is a nursery for government scientists. Socialism is the mother, not a threat. That is your why.*]

Pretty good bet they're feeding at the APW gravy train. It is disheartening to consider the lost social benefit of the taxpayer largesse funneled into this farce over the last 30 years...

jp

[*AGW, actually. You do recognize the answer to your question, but you trivialize the consequences. The U.S., and much of Western culture with it, is in a world of hurt from Islamic jihad and depression, having yet to spend much of anything on curing the big-ticket, artificial crises of energy, health care, and AGW, the three fronts of Socialist jihad.*

[*Write your Democrat in D.C.*]

Posted by John Port | May 22, 2009 8:56 PM

JT wrote:

I write only to draw your attention to this document:

http://www.kidswincom.net/climatechangepdf.pdf

which is apparently authored by Fred H. Haynie who describes himself as a Retired Environmental Scientist. It seems credible, so far as I am able to judge (admittedly, not far). It also seems fairly consistent with your argument.

[*RSJ: File this under FWIW (For What Its Worth). Haynie's is an isolated work on climate, and my first reaction was to pan it. I had problems with the technical style, and I have many disagreements with his version of climate physics (e.g., solubility, salinity, clouds, wind, CO2 gradients, ice, albedo) and with his interpretation of the quality of available data. However, as I reviewed his presentation closely, I found a couple of novel, intriguing points. In particular, I would like to know precisely what he means by the "Isotope Depleted" and "Non Isotope Depleted" traces, and how he determined them. The chart format is just not adequate for a detailed review. I would like to read a technical paper or papers from him covering this material, including precise data sources, and all derivations and reduction techniques. His curve fitting should be springboards to cause and effect models and not cantilevers. He should not end with conclusions from discussions of graphs and subjective correlations, but from numerical correlations, presenting and analyzing correlation functions. To be a significant contribution, each point of his paper should respond to IPCC reports.*]

Posted by JT | July 2, 2009 2:07 PM

Fred H. Haynie wrote:

I Googled my name "Fred H. Haynie" to see how much of any response I got from posting on several climate blogs. I have scanned your paper and basically agree and my analysis tends to support it. Your model should also consider that the deep ocean brine is essentially in equilibrium with solid calcium carbonate and thus could be an unlimited source of CO2.

As that cold brine upwells, it warms, releasing CO2 and precipitating CaCO3. The thermodynamics of these heterogeneous reactions can be rather complicated. I welcome suggestions on how I can improve my analysis and make my presentation more readable for laymen and scientists. I don't think I am wrong in my conclusions. I quit writing for peer review publication years ago but I would consider co-authoring a paper to get the truth out in a more convincing manner.

[*RSJ: The model on which IPCC relies is invalid as a minimum for the reasons laid out in the **Journal** in the topic **IPCC's Fatal Errors**. Among these is the mismatch between the Vostok record and the initial conditions of the GCMs. This fault extends back through the entire Vostok record, which the GCMs neither exclude nor replicate to any extent. That record of the last half million years or so is rather benign, especially in view of the estimates that atmospheric CO2 concentration millions of years ago has been 20 times that of the present. That phenomenon is without a model. Perhaps your observation about a vast reservoir of CO2 needs a mechanism for its release to the atmosphere, and subsequent recovery.*

[*In the state of the climate over the past half million years, the surface layer of the ocean appears to be a buffer holding molecular CO2 to feed oceanic process and to satisfy Henry's Law for exchange with the atmosphere. IPCC instead advances the absurd model that the surface layer is in equilibrium, causing it to buffer AGAINST Henry's Law. This buffer reservoir avoids the clearly false equilibrium assumption and permits Henry's Law to operate according to theory. It also serves, in the first order model, to isolate the climate against ocean processes such as you suggest.*]

Posted by Fred H. Haynie | July 24, 2009 7:09 PM

John, Channel Isles wrote:

Hello Dr G,

Sorry I've very little AGW 'science' to discuss because all I've seen is the usual crony scientist propaganda stories peppering the media on how we're in a far worse position than the position they predicted originally. Namely based on an extrapolation of tree rings near the Arctic Circle the AGW crew have now reached total LaLa Land (fantasies of worse fears based on predicted fears based on

faulty computers based on extrapolated assumptions from a tree). All very, very scientific stuff indeed!

[*The past couple of weeks have not been wanting for AGW news. Steve McIntyre struck again, revealing that M.E. Mann, R.S. Bradley, and M.K. Hughes picked selectively among available data to prove their Hockey Stick fraud. Tokyo's pitch for a green Olympics coupled Hatoyama's pledge to the UN to cut CO2 by 25% failed to impress at Copenhagen. Going Green came in next to last; Affirmative Action was last. Japan promised a solar energized stadium, because – pulling out all the stops -- the 2016 games may be "the last Olympics in the history of mankind." Not enough.*]

So my first question is has the 'profession' of science ever been in a worse (more dishonest and corrupt) state in man's history?

[*In more news this week, Apple computer has resigned from the US Chamber of Commerce in protest over the Chamber's champion call to put global warming on public trial. Apple not only revealed that its technical genius is merely savantism, but that it sides with the forces of anti-science, rejecting analysis, debate, the scientific method, or even rational processes.*]

In fact AGW doesn't get more serious than this LaLa Land of Gov't cronies which is why rest assured Western populations are all totally ignoring this tiring clap-trap bored stiff from years of Cry Wolf leftie journalists extolling the latest fear mongering crony science project. But it's the 'Road to Copenhagen' so the bunkum keeps the warming propaganda stories at fever pitch despite yet another (10th in a row) wash out summer!

Copenhagen is a 'done deal' already pre-negotiated, pre-agreed, words typed before they even get there. Wise as the City will probably be snowed under for the global warming conference and the global spivs won't want to risk not being able to arrive to seal the deal on this stitch up job! Any hope of a science or a scientific debate breaking out at Copenhagen is naive. AGW is all staged politics now and as you've said before only a political sea change, rather than scientific discourse, will see AGW meet its deserved castration.

[*RSJ: Could the Olympic spirit travel the 4.4 km from 1550 København V to 2100 København Ø?*]

I'd like to take issue with your reply to John Port (3 posts above) regards Obama being "a socialist". Both Obama and Gordon Brown both say, without batting an eyelid, that they do not wish to run car companies or nationalize banks. And they're telling the truth (for once!). Because what Brown and Obama now follow is fascism. It is about time this term was dusted off of its Nazi connotations (WWII baggage) because fascism the most accurate and correct term for what modern 'smart' socialists now practice to the letter.

[*RSJ: I stay away from such labels. No two states have ever been identical, so labeling fails. In liberal arts we like to debate such things without labels sufficient to discriminate between states. We have mental models that make associations, e.g., Soviet Union:Marxist, UK:Socialist, Italy:Fascist; Germany:Nazi; Saudi Arabia:Islamic fundamentalist; US:Capitalist. So how can we tell where Obama is headed? Does he even know, much less care?*

[*We might get somewhere talking about totalitarianism, one-party rule, dictatorship, communism, collectivism, capitalism, and socialism, if we develop sufficient definitions. You say, "fascism [is] the most accurate and correct term", but is any of these terms accurate enough?*

[*What does ownership of the means of production and distribution mean? Does it matter whether the head of the company is a government employee, a puppet of the government, or a citizen entirely handcuffed by government regulations? Do we make a distinction based on the fate of corporate income? And what if the government has reduced the company to operating at a loss? After taxes? Is a loss sufficient?*

[*These words are charged with emotions and preconceived concepts, and are more polarizing than persuading. Perhaps Americans could agree that we want Obama to fail —*

1. At debasing the dollar and causing extreme inflation by borrowing.

2. At losing wars, weakening defenses, and emboldening enemies.

3. At expanding government by spending, intruding into private lives and free enterprise, replacing liberties with debilitating taxes, with group rights over individual rights, and with government control of the means of production and delivery.

4. At denigrating these typically Western values, and indoctrinating our children in a cult of personality, all in a world view passed through a prism of racism and with pride replaced by guilt.

5. At respecting junk science.

Whereas socialism advocates the State grabbing the means of production the left has realized they bankrupt everything they touch and what is bankrupt, cannot be taxed. The correct description of fascism is where the State 'allows' the private sector to flourish but controls with an iron fist and taxes the private sector. This is why Obama and Brown have met at the G20 and call the meetings "historic" because they are agreeing to pass over their democracies powers over finance and industry to an unelected fascist cabal (the EU, IMF, OECD and UN) who will control with draconian legislation whenever they wish to turn the screws.

[*RSJ: You might be giving the left too much credit. To them, bankruptcy may be a peculiar concept of capitalism. A capitalist foregoes the pleasures of his income to create a product or service for which consumers are likely to divert their income to purchase. Bernie Madoff was not a capitalist, he was a thief. He was a redistributionist, seeking only to transfer wealth wherever it might have accumulated. That is how the left and socialists think. Wealth is inequality; income must be equal for equal work, a government function. Profit is greed; competition is waste. Socialism is to provide equality among the proletariat, and to distribute wealth among an elite. The first is the propaganda, the latter, the reality. In the real world, a spending bill is redistributionism; a tax rate reduction would be a*

stimulus.]

As prime evidence of the new lefts fascist strategy I offer the example of the credit crisis itself. The biggest single contributor to the credit crisis was not the fall Lehman's but the Democrats 'football' social housing for the poor, sub-prime mortgages bought up by the twice bankrupt each now Freddie West and Fannie Mae (both Democrat institutions). So what has Obama, Bernanke, Geithner and Banking Committee Chris Dodd advocated to solve the $trillion dollars p*ssed down the toilet bailing out Fannie and Freddie of the sub-prime crisis?

Well the Bill brought forward to discuss in Washington last week has not a single sentence amongst its 1,000 pages of new controls, legislation and recommendations on sub-prime, nothing on the Credit Agencies that rated (defrauded) investors they were AAA, not a word on Freddie and Fannie who bought up these risky mortgages, not a word on the Feds failure to regulate banks, not a word on the Feds fanning the flames of the credit boom since the mid-80's and not a single word amongst 1,000's on the Democrat politicians tacit endorsement of these credit bubbles. The biggest contributors (failures) to the crisis and not a single word of mention.

[*RSJ: If the rating agencies had ever been brought to task, they might have argued that they believed that the federal government through Fannie and Freddie were guarantors of these instruments. However, having made their ratings, their downgrading of them demonstrated their guilt. It was willful and criminal, and a breach of the public trust. This enterprise included bribery from the financial institutions, coordinated with threats from the rating agencies to Congress. The Congress needs to recuse itself from the needed investigation*.]

No the 'solution' these "socialists" have come up with is to regulate hedge funds, private financial companies and even down to pawn shops. None of whom went bankrupt, none of whom added a single stitch or problem or bankruptcy to the credit crisis.

This is pure fascism at work.

Your now totally corrupt and bankrupt US Gov't and its crony agencies are patently not involved in finding a solution to the credit crisis in the very Bill on the credit crisis. Not just because most of the problems (cheap credit to house the poor) are entirely rooted, caused and bailed out (covered up) in Congress. But because the US Gov't is only interested in extending its total power to cover all financial institutions and instruments not currently within its power base despite having no good reason, financial or social, to do so.

Socialism is dead. Even the socialists realize it. Welcome to fascism. As practiced by Obama, Brown, Sarkozy and the international quangos they are about to explicitly pass our sovereign national power over to. AGW is just another ratchet in these unelected self-gratifying fascist quangos to extend power over all consumers, commercial products and business.

Forget a few Arab terrorists. They don't come even remotely close to the danger, threat and actual damage our Western democracies are about to suffer from the fascism now being practiced by Obama, Brown, Sarkozy et al.

[*RSJ: I disagree. Islamic terrorism is just the latest totalitarian plague, as threatening as Nazism, Communism, and their poor cousin, Fascism, ever were, but in slow motion. These fade in our rear view mirror. To survive, this latest evil has adapted to Western defenses -- cloaked its national identities, dispensed with uniforms or ID cards or dog tags, attacks soft targets, uses terror, enlists suicidal soldiers, and caters to an ever sympathetic liberal press -- and exploiting sanctuaries – hiding behind national boundaries, civilians, clerical robes and mosques, Geneva Accords, criminal law, and civil rights. And it works with unbounded patience. It's immediate target is Israel, and always the weak will and impatience of the West that stands in its way. The longer we wait to squash it, the more it will cost. This is the lesson of its predecessors. We're heading for a terrible war between Israel et al. vs. Iran et al. Islamic jihadism is setting the stage for Europe to be next.*

[*Meanwhile, the US is heading for bankruptcy, certain to infect the whole world. Obama's FY10 budget supplies the following. He was handed declining receipts of 14.6%, but it was his spending that increased by 34.0%, FY09 to FY10. Obama projects a major turn around for both -- receipts for the next six years will reverse course to run at +7.8% per year, while his outlays will slow to just 2.9% per year. The Federal Debt stands at $10 trillion, which he projects will increase to $18 trillion over the next six years. Interest on the debt is currently at a historic low of about 1% of debt, and he projects it will rise sharply, but only to 2.5%.*

[*Between 1960 and 1974, the Federal Reserve increased its ownership of public federal debt from 11% to 23%, sliding down a slippery slope in an ever increasing attempt to hold down interest rates. Nevertheless, treasury rates increased from 4% to 7%, and back to 6%, thanks to a brief recession in '73, while federal expenditures increased 8.2%.*

[*The popular notion is that "the Fed sets interest rates", but it only has the ability to meddle with them. Unfortunately, its meddling produces feasts and famines. No one can predict interest rates much better than anyone can predict Earth's surface temperature. Imagine, though, what might happen if CO2 emissions actually did change the climate!*

[*To increase its holdings, the FRB intervenes in the treasury auctions, buying the remainder once the yields at auction get go above target. In the early 70s, interest rates adjusted for inflation, real interest rates, as they are known, went negative. Anyone was a fool who didn't borrow, much less held cash. The ensuing economic expansion was huge and senseless – empty new cities in the desert, excess factory capacity, mergers and acquisitions at ever inflating prices, wind farms, limited partnerships, but few new products. Seed money and debt came to be spent for executive bonuses, a fatal disease in publicly held corporations brought on by philanthropist Michael Milken that still infects capitalism.*

[*The Fed simply gave up in 1974, letting market forces set the yields, instantly driving up interest rates. At the same time, it began a dump of its holdings at 1% per year that would last for the next 12 years, expanding the offerings and further driving up rates. Treasury yield soared to 15%. It was above 10% from 1979 to 1984. Inflation, which had been hidden, quickly materialized at about 22%. The Carter Administration was toast, never to know what happened to it. S&Ls and banks failed, and had to be rescued. Every portfolio*

plunged in present value as discount rates skyrocketed. It was an accounting catastrophe for which we still have little appreciation, much less a fix.

[*Just like a banana republic or the Weimar Republic, we print money. This is a popular but silly observation because all of our currency is printed. But unlike the printing press money of those prototypes of hyperinflation, we manage to keep track of what's printed, occasionally paying it back, but always paying interest on it.*

[*From 1992 through 1996, the Fed returned to buying down treasury rates in a modest way just in time for the Clinton administration, growing its holdings at 0.23% per year. Then from 1997 through 2002, it increased its position at the unprecedented rate of absorbing 1.2% of the public debt per year. It didn't drive real interest rates negative this time, but it did inflate the dot.com bubble by tamping down apparent interest rates. That bubble boosted the Clinton record, at least until it burst in 2000. The FRB went back into a dump mode in 2003 at 0.31% per year through the white hot leveraging with derivatives and subprime mortgages until the ratings bubble burst, known popularly by some as the housing bubble.*

[*When the market crashed in 2007-2008, the Fed ran to the window and quietly but quickly unloaded a full 7% of the public debt onto the market. So now, at the opening of the Obama administration, it owns 8.5% of the public debt, a low stretching back to 1951. However, it announced plans to buy $300 billion of Obama debt this year – for openers.*

[*Now Obama plans to raise the debt 80%. That's $1.3 trillion per year paid with a modest debt interest rate increase from 1% to 2.5%. Undoubtedly this includes his "deficit neutral" healthcare, and Lord-knows-what for Cap & Trade or more stimuli. Projecting the sale of treasuries at the recent growth rate, as is likely to happen without a marked rise in yields, the Fed is going to own 38% of the debt in two years. If Obama is just 20% low in his already optimistic budget estimates, the Fed would need to own 45% of the public debt in two years, and increasing to 53% by 2014.*

[*Obama's projections show interest on the debt at $143 billion in 2009, rising to $460 billion by 2014. This is an increase from 3.6% to 11.5% of the President's budget, a tripling – provided he meets his targets: 3% spending increases, 8% increase in tax receipts, free healthcare, free Cap & Trade, a free ride for the middle class, major producers (car companies, banks, the healthcare system and insurers) taken off-line, but the remainder of capitalism working at full steam against the tides of regulation and spending. Wage controls are going into effect now, and price controls should be close on its heels.*

[*Obama's whole projection is wildly out of whack -- an extra trillion dollars a year of new money dumped into the economy with no "inflation". His team feels the economy is improving because the stock market is rising. But so is gold, which earns nothing. The gold price of stocks is nearly flat – the Dow closed on 10/8/09 at 9809, with gold running at about $1060 per ounce. The DJI is 9.3 oz$_{AU}$, about where it was in January. Inflation exists when the money supply increases, not prices and not the CPI. The first evidence is in the commercial markets, then a month later, the treasuries, eventually the CPI.*

[*Obama's puzzle pieces don't fit together. It's what the politicians politely call "unsustainable". Should his modest interest rates materialize, we'll have negative real interest rates again. But at the same time, when the Fed owns the brunt of the debt and he can't make the interest payments, the Federal Reserve System will be facing bankruptcy along with the nation. The Fed isn't going to take this big of a risk, and interest rates are going to outstrip Obama's wishful budgeting and crazy spending. Obama's hopeful $460 billion interest payment in 2014 could well be triple again should they come to pass.*

[*And then we won't be able to sustain anything, to say nothing of a war effort.*]

Posted by John, Channel Isles | October 4, 2009 11:31 PM

John, Channel Isles wrote:

0911042107

Dr G,

Your responses never fail to inspire me and help update and refine my own understandings. Thanks.

Good news with both New Jersey and Virginia voting Republican. The swing to the right mirrors Europe's voting patterns. When the socialists shrill call was "the death of capitalism" when recession hit it has proved the opposite (socialists never were good at foresight) and citizens have moved right to what they believe to be more business friendly/competent Parties. Recession is proving to be socialism's death.

Exit polls in Virginia and New Jersey showed public concern (85-89%) about the direction of the economy being the main issue. We're fed up with spending debt as a 'solution' to a problem caused by debt spending.

Post Oct 2010 Congressional elections, will we be left with an Obama administration much like Clinton's last few years, neutered and with its balls cut off unable to action change?

[*RSJ: Thanks for the kind remarks.*

[*The Virginia and New Jersey results are indeed encouraging. Normally the U.S. drifts to the left until the public feels some very great pain. We have California in bankruptcy, paying its bills with IOUs, while the people vote 53:43 to send a replacement leftie Congress, and promise to re-elect Pelosi. I have feared that Obama would have to put the U.S. into a political equivalent of in extremis before*

remedies could begin, and I also feared that much of the damage he is intent on inflicting would be indelible.

[*Obama is destroying the U.S. dollar and economists almost to a man seem unaware. They still claim that inflation is not here, but that's because they have revised the definition of inflation from "an expansion of the money supply" to "a general increase in prices". It's the money supply that's being horribly inflated. It hasn't hit the CPI because of the very low velocity of money, but it has hit the price of gold and the stock exchanges. The situation is most grave. As the country begins to get back to work, we will face the terrible taxation of banana republic inflation.*

[*Obama has spent a trillion or more on a "stimulus" that stimulates nothing. It did make the U.S. GDP look good for one quarter. Our economy runs on the flow of capital, not pools of wealth. It runs on a river, not a reservoir. Pools of wealth attract thieves and other redistributionists, such as socialists and Bernie Madoffs. Additional income stimulates entrepreneurs to defer for a profitable return from sales to consumers who have additional discretionary income. Obama spent money instead on government projects and on individual benefits. What he needed to do was reduce taxes on businesses to encourage new products and services, and reduce them on individuals, who might be inclined to consume a better business output.*

[*Health care might pass. As Obama wants it, the price is another big hit on the dollar. It would ruin our health care system, but he's put the medical part off five years to make the ten year bookkeeping appear to balance. We will be able to repeal the medical part. The taxation part will keep us from recovery and hold off the inflation tsunami for a while.*

[*Cap & Trade is next. This will be a huge hit on the engine of our economy, justified to chase the AGW bogeyman. The wound is not restricted to primary energy sales, but will hit every business or service that uses energy: transportation, agriculture, even down to manpower, and taxes. It does seem that it will be quite repealable. Of course, it will no effect on global warming.*

[*What pundits think is happening based on Virginia and New Jersey is that center third of the American voters has shifted from left to right. We may be moving them away from the birthrights of our Affirmative Action racist mentality to the idea of fiscal and foreign policy responsibility. The shift could have an immediate chilling effect on Congress, perhaps forestalling Obama's universally harmful programs. The best hope is that both houses of Congress will reverse alignment in 2010.*

[*We have at least two chronic problems here. One is a lack of leadership on the right that couples charisma with intellect without straying off into the little tent of social conservatism. The other is that when we send our so-called conservatives to Congress, they turn populists to perpetuate themselves in office. We desperately need term limits. We could also benefit from revitalizing our compromised electoral college so that once again the people do not directly elect the President. Neither is in the cards.*]

Posted by John, Channel Isles | November 4, 2009 9:07 PM

John, Channel Isles wrote:

0911042121

Forgot to mention I watched Lord Monckton on Glenn Beck, FOX Channel earlier this week. Monckton said Dr. Richard Lindzen of MIT fame, had disproved CO2 as a greenhouse with "a meticulous analysis of the data over 20 years". Lord Monckton showed about a dozen charts from the IPCC all showing a rising line over dotted graphs, then showed Lindzen's graph which demonstrated a declining line.

It wasn't explained, or i missed it, precisely what Lindzen has disproved with this 20 year study. Can you explain please why Lord Monckton said this was the death of the CO2/GG theory?

[*RSJ: The reference is to Lindzen, R.S., and Yong-Sang Choi,* On the determination of climate feedbacks from ERBE data*, prepared for Geophysical Research Letters, 7/14/09. First, a caveat. I have read Lindzen's paper without studying it in detail. Questions posed here might yet be answered on a thorough analysis. Nevertheless, the bottom line is solid.*

[*Bottom line: The Earth Radiation Budget Experiment (ERBE) is a full-up measurement program, accordingly all feedbacks are closed as exist naturally in the climate. This is not true, however, of any of the models reported by IPCC. Lindzen cites 11 models in his Figure 3. These models are mutually consistent, and as a set fit IPCC's conclusion that the variability in modeled equilibrium climate sensitivity, between 2ºC and 4.5ºC (2K to 4.5K), is due to variability in the models. Therefore, Lindzen's model set appears to be the same or at least equivalent to IPCC's. As reported in the* ***Journal****, these models are open-loop with respect to cloud albedo. This observation accounts for the difference Lindzen reports between ERBE and the GCMs.*

[*Because of the overwhelming power in the negative feedback of cloud albedo, being greater than any other climate feedback, a fair characterization of the GCMs is that they are open-loop with no further qualification.*

[*Lindzen's last figure contains three climate sensitivities, one for longwave radiation (LW), one for short wave radiation (SW), and one combined (LW+SW). IPCC only uses the first. This is simply a recasting of the open loop problem. In Figure 3, Lindzen, et al., show a curve for the relationship between the Feedback factor on the right hand ordinate and the Equilibrium climate sensitivity along the abscissa. They show two lines representing range of the Equilibrium climate sensitivity, which is 0.388 and 0.497, found by digitizing the graph.*

[*IPCC could say that it models cloud albedo. What it derives is a specific cloud albedo, meaning a reflectivity per unit area. The total cloud albedo is what's important, which is the average specific cloud albedo times the cloud cover. IPCC says,*

> [In spite of this undeniable progress, the amplitude and even the sign of cloud feedbacks was noted in the TAR as highly uncertain, and this uncertainty was cited as one of the key factors explaining the spread in model simulations of future climate for a given emission scenario. This cannot be regarded as a surprise: that the sensitivity of the Earth's climate to changing atmospheric greenhouse gas concentrations must depend strongly on cloud feedbacks can be illustrated on the simplest theoretical grounds, using data that have been available for a long time. Satellite measurements have indeed provided meaningful estimates of Earth's radiation budget since the early 1970s. Clouds, which cover about 60% of the Earth's surface, are responsible for up to two-thirds of the planetary albedo, which is about 30%. An albedo decrease of only 1%, bringing the Earth's albedo from 30% to 29%, would cause an increase in the black-body radiative equilibrium temperature of about 1°C, a highly significant value, roughly equivalent to the direct radiative effect of a doubling of the atmospheric CO2 concentration. Citation deleted, 4AR, ¶1.5.2, p. 114.
>
> [The RF due to the cloud albedo effect (also referred to as first indirect or Twomey effect), in the context of liquid water clouds, is estimated to be -0.7 [-1.1, +0.4] Wm^{-2}, with a low level of scientific understanding. AR4, Ch. 2 *Executive Summary*, p. 132.

[*"Low level of scientific understanding" indeed. The nominal cloud albedo of 0.31 reduces the incident solar radiation of 342 Wm^{-2} to 235 Wm^{-2} to be absorbed in the atmosphere and at the surface. IPCC's Twomey cloud albedo effect is 0.3% of the nominal, equivalent to a trivial albedo change to 0.2991. Albedo is only known to an accuracy of about 0.04, roughly between 0.26 to 0.34. IPCC's cloud albedo effect is well into the noise of the measurement. That noise conceals the dominant climate feedback, and it is negative.*

[*IPCC admits above to the strength of cloud albedo, but reports it one-sided: increasing the global average surface temperature, IPCC's pre-conceived goal. The phenomenon works both ways, decreasing GAST with the same power. As report in the* ***Journal****, all the elements are in place here and there in IPCC reports to establish that the nominal 60% figure is proportional to temperature, creating a negative feedback. The GCMs keep cloud cover fixed with respect to GAST, a process IPCC calls parameterization, confirmed in part by the following:*

> [Humidity is important to water vapour feedback only to the extent that it alters OLR. Because the radiative effects of water vapour are logarithmic in water vapour concentration, rather large errors in humidity can lead to small errors in OLR, and systematic underestimations in the contrast between moist and dry air can have little effect on climate sensitivity (Held and Soden, 2000). IPCC, TAR, ¶7.2.1.2 Representation of water vapour in models, p. 426.

[*Cloud cover is proportional to both cloud condensation nuclei (CCN) and humidity. IPCC considers CCN only with respect to aerosols, but refuses to consider the Svensmark effect of galactic cosmic rays as another source. The latter is modulated by solar activity, with the result that cloud cover is proportional to solar activity because the solar wind modulates GCRs. When a surplus of CCN exists, cloud cover depends on humidity, and humidity depends on surface temperature, recognized by IPCC for cloud GHG or longwave effect. What IPCC is missing is the short wave or cloud albedo effect.*

[*Furthermore, IPCC's second sentence above (¶7.2.1.2, p. 426) is false and leads to a misrepresentation of atmospheric absorption. It is true that radiation forcing (RF) of the GHGs can always be* ***approximated in a narrow range*** *as logarithmic. The actual curve, though, is the complement of a decaying exponential, $RF = RF_0 + \Delta RF*(1-e^{-kx})$, where x is the logarithm of the concentration (or of the distance through the medium), normalized. RF_0 is the radiative forcing with no gas in the band of interest, and ΔRF is the additional radiation forcing the gas would add at saturation in that band. This is a consequence of the Beer-Lambert Law, which IPCC neither mentions nor uses. The difference is that a logarithmic radiative forcing never saturates, but increases without limit as the gas concentration increases. IPCC's model is convenient because the radiative forcing is the same for any doubling, say, of the gas concentration, and it need not determine how much forcing has already occurred. That is, it need not set an operating point for the RF curve. The problem that arises with the logarithm is that the calculated longwave absorption in just a narrow band never saturates but instead goes to 100% (maximum RF) as if the gas were the only gas present and absorbed uniformly over the entire LW band. The bottom line again: IPCC makes CO2 LW absorption in particular too potent, and ignores its saturation without ever evaluating the effect.*

[*The cloud albedo effect, expressed in the* ***Journal*** *as a feedback mechanism, is confirmed by Lindzen as an additional short wave equilibrium climate sensitivity. Equilibrium is vernacular in climatology where it is often seriously confounded with thermodynamic equilibrium. It can be read as steady state, which is the dynamic endpoint with feedback loops closed.*

[*IPCC says,*

> [If the amount of carbon dioxide were doubled instantaneously, with everything else remaining the same, the outgoing infrared radiation would be reduced by about 4 Wm^{-2}. In other words, the radiative forcing corresponding to a doubling of the CO2 concentration would be 4 Wm^{-2}. To counteract this imbalance, the temperature of the surface-troposphere system would have to increase by 1.2°C (with an accuracy of ±10%), in the absence of other changes. In reality, due to feedbacks, the response of the climate system is much more complex. It is believed that the overall effect of the feedbacks amplifies the temperature increase to 1.5 to 4.5°C. A significant part of this uncertainty range arises from our limited knowledge of clouds and their interactions with radiation. TAR, ¶1.2.3 Extreme Events, p. 92.

[*updated as follows:*

> [[W]e conclude that the global mean equilibrium warming for doubling CO2, or 'equilibrium climate sensitivity', is likely to lie in the range 2ºC to 4.5ºC, with a most likely value of about 3ºC. Equilibrium climate sensitivity is very likely larger than 1.5ºC. AR4, Box 10.2 Equilibrium Climate Sensitivity, p. 799.

[*Lindzen now reports that the total measured equilibrium climate sensitivity is in the range of about 0.4ºC to 0.5ºC instead of the nominal 1.2, and well below IPCC's "very likely" lower bound. My own toy model (still in queue to be published) showed that the closed loop climate sensitivity can be a tenth of the open loop value* ***without being detectable in the current state-of-the-art in albedo measurements.***

[*Chris Monckton was correct. This should be another death blow to the CO2 GHG theory. It is my Number 8 in* ***Fatal Errors in IPCC's Global Climate Models****. I have provided the theory, the à priori part, and Lindzen the validating experimental, or à posteriori, part. In short,* ***Lindzen's paper on the Earth Radiation Budget Experiment is validating of the RSJ model predicting that Earth's albedo regulates the global average surface temperature.***]

[*{Begin 11/26/09 PS} The fire alarm has rung over at the CRU crowd:*

> [From: Tom Wigley To: Phil Jones Subject: Re: Revised CC text Date: Fri, 06 Nov 2009 13:40:57 -0700
>
> Thanks, Phil.
>
> A bunch of us are putting something together on the latest Lindzen and Choi crap (GRL). Not a comment, but a separate paper to avoid giving Lindzen the last word.
>
> Tom.

[*The clock started 11/6/09. I'm betting the fire truck will get through the peer review process in record time. Note that the reaction from Wigley was not technical or substantive, but suppression of any opposition to the group's proprietary brand of science. Nothing collegial here.* {End 9/11/26 PS}]

Posted by John, Channel Isles | November 4, 2009 9:21 PM

John, Channel Isles wrote:

0911042133

And finally Dr. Richard Lindzen appeared on radio saying the public get it, that AGW is a nonsense (despite years of wall to wall Gov't propaganda) but "intelligent people are vulnerable".

Here's a link to an article and some great news on the page, too, about Al Gore becoming a climate science fraud billionaire and public polls at an all time low about AGW.

The 2 greatest attacks of the left, to our economic system and the weapon of climate change, have been neutered despite their colossal media machine and financial clout (Democrats outspend Republicans by quite a margin on campaign funds). Capitalism is winning hands down at least cost :))

http://www.climatedepot.com/a/1812/MIT-Climate-Scientist-Ordinary-people-see-through-manmade-climate-fears--but-educated-people-are-very-vulnerable

[*RSJ: Climate Depot is Marc Morano's blog, and it's a good resource for continuing news on the AGW fraud.*]

Posted by John, Channel Isles | November 4, 2009 9:33 PM

John, Channel Isles wrote:

0911051358

Climate Change provides the ultimate ratchet on Western society and indeed our industry and wealth. Including an attack on meat eating and I read yesterday an article on curbing how many babies we have (babies produce 4 tons of carbon a year, oh dear!)

There are many conspiracy theories about it being the refuge of the left, beaten out of power (by popular public support) in the '80s during the Thatcher-Reagan era. And undoubtedly it is the left that is promoting this political, as opposed to scientific, agenda with a zeal that brushes away all honesty in both its tactics and ambition.

There's also talk of an international cabal that publicly repeat the same mantra about a "New World Order". Gordon Brown our British PM has repeated the term many times and he has been uber-keen to sign away our sovereignty to the unelected EU/EC cabal and with the banking crisis, cede regulation of our entire banking and financial industry to a new international regulatory body (un-democratically elected of course) as has Obama at the G20 meetings. Which they both called "historic".

Doesn't quite add up Brown and Obama so keen to clean up the financial system and stabilise it when their own financial governance looks like a drunken spendaholic in a jewelry shop with 40 new credit cards in their pocket!

Lord Monckton asks "Is Obama Poised to Cede US Sovereignty?" at Copenhagen. Link. http://www.youtube.com/watch?v=PMe5dOgbu40

Al Gore boasts: 'Global governance' coming with carbon tax http://www.wnd.com/index.php?fa=PAGE.view&pageId=103634

[*RSJ: Have you noticed how quick the agents of the left are to claim that the shock and outrage engendered by their insanity is a conspiracy? Yet their plan leaves a paper trail of treachery, evil, and fraud, complete with action taken in its execution, without a hint of conspiracy from anyone.*

[*In the psychosis of conspiracy theorists, proof of the conspiracy lies in the absence of evidence. The left exploits this psychotic behavior to fend off the opposition.*

[*In response, I note the old saw that sometimes they **are** out to get you.*]

Posted by John, Channel Isles | November 5, 2009 1:58 PM

John, Channel Isles wrote:

0911051431

Your good buddy Dr, Gavin Schmidt of NASA fame has issued 'a correction' (is that science speak for a through gritted teeth apology?) to Christopher Booker at The Sunday Telegraph.

Schmidt was rolled out to 'correct' increasingly left loonie, Dr. James Hansen of GISS fame, no less than twice in the past 2 years, when GISS has come under fire for publishing seriously inaccurate data.

The first time Schmidt was called to damp inaccuracies was 2007, when Dr. Hansen's data was revealed to have been systematically "adjusted" to show recent temperatures as higher than those reported by the other three official sources. The figures were exposed by two science blogs, Watts Up With That, run by Anthony Watts, and Steve McIntyre's Climate Audit.

The second Schmidt cover up job came last year after butterfingers at GISS showed the previous month as the hottest October on record. The same two expert blogs revealed, as the reason for this improbable spike, that GISS had reproduced many of its September figures for two months running.

Well, global cretin Hansen is on record as saying the political message is more important than the scientific data to support it!

Dr. Schmidt may have had no responsibility for these recurring errors (Hansen f**k ups), but it was he who was wheeled out to explain that 1 of the 4 official sources relied on by the IPCC did not have sufficient resources to maintain proper quality control on its data!

[*RSJ: The individuals behind the AGW fraud express the usual motives of a quest for power, control, and recognition. But don't forget money! They have turned around their undisciplined acceptance of numbers too-good-to-be-wrong as a pitch for more funds and a complaint that they are being spoon fed.*]

Ah, so funding error caused data error but the loonie left scientist who loves bent data to make political points is just an innocent victim according to Schmidts' cover story!

So Schmidt contacted the Telegraph to point out that he is not "involved" in Dr. Hansen's GISS temperature record, one of four official sources of global temperature data relied on by the UN's IPCC. So does Schmidt get paid on a 'per PR cover up job' basis for his role Dr G.?

http://www.telegraph.co.uk/comment/columnists/christopherbooker/6475667/Gavin-Schmidt-a-correction.html

[*RSJ: I appreciate your analysis of these characters. But I think looniness smacks of a legal and humane excuse. These individuals know what they are doing. They are committing a fraud for profit, committed in violation and ignorance of their ethical obligations to the public, and exhibiting some of the poorest excuses for science in modern times. Their actions are incompetent and arguably rise to the level of criminal.*]

Posted by John, Channel Isles | November 5, 2009 2:31 PM

John, Channel Isles wrote:

0911100856

Well it appears ahead of schedule the CO2 deal at Copenhagen will just be a lot of 'hot air'. Phew! The wheels have (already) come off the politicians' darkened limos on the way to Copenhagen. Despite the socialists best efforts to rig a deal before they arrived, it appears, like the tattered EU attempt earlier this year, there's no chance of any agreement on fundamental details as too many countries including large ones like China and India just aren't interested in the Western socialists junk science.

Lord Smith, the UK's Environment minister, admitted as much yesterday that Copenhagen will just be a loose waffling diplomatic fudge or meaningless words with no agreement on dates or target CO2 reductions. Like Kyoto, Copenhagen won't be worth the paper it's written on and even Obama is dithering whether to even bother attending!

AGW 0 - 1 Planet Fantastic

[*RSJ: Why don't the members focus their cutbacks on the U.S. alone? Obama appears ready to go along. It's just a Marxist movement, isn't it?*]

Posted by John, Channel Isles | November 10, 2009 8:56 AM

John, Channel Isles wrote:

0911161437

Ben Bernanke of Fed fame said today he'd be "attentive" toward the sliding tragedy of the US Dollar even though the Fed has no responsibility for such, it's the US Treasury's' role. Meanwhile he is not at all attentive to asset bubbles saying he can't see any!

[*RSJ: Economics is irresistible, emotionally and substantively, isn't it? Perhaps the title to this article should be "The Acquittal of Carbon Dioxide and Other Economic Topics". Since the objective of the carbon dioxide fraud has become the capturing of capitalism, a primary tenet of the left worldwide, economics is not too much of a side track.*]

Isn't there a stock market bubble right now? Gold, oil and commodity bubbles? Credit/debt bubbles? And of course the Fed bubble of buying up US Gov't debt by printing funny money? Ben can't see any bubbles. Is he wearing the shades of a cool dude or the blacked out glasses of a blind man??

[*RSJ: Economic moves seem to have a rational part and often an irrational part. I believe that bubbles are an irrational part. Markets and gold are surging right now, and a rational reason is the extraordinary and unconscionable expansion of the US dollar. The amount of the increase in prices is predictable, except for the irrational overshoot likely to occur at the end. The latter will be the bubble when we get there in a few years.*

[*Economists, through the '40s as I recall, defined inflation in elementary texts as an expansion of the money supply that causes a general increase in prices. That definition still exists as an alternative in English dictionaries. They switched to define it as "the rate of a general increase in prices", or something analogous. Note that they changed the dimensions of inflation. No longer is it a quantity of money, but now it is a rate of change of prices. This was critically important in Keynesianism, even as practiced by Bush '41 in the terminal throes of his office, but overwhelmingly by novice Obama. It decouples the action of government, the only possible cause of inflation, from its propensity for reckless spending.*

> [People assume that inflation means rising prices and that it exists only when and to the extent that businessmen raise their prices. It appears to follow, on this view, that inflation would not exist if price increases were simply prohibited by price controls.
>
> [Actually, as we shall see later … , this view of inflation is utterly naïve. Rising prices are merely a leading symptom of inflation, not the phenomenon itself. Inflation can exist, and, indeed, accelerate, even though this particular symptom is prevented from appearing. Inflation itself is not rising prices, but an unduly large increase in the quantity of money, caused, almost invariably, by the government. In fact, a good definition of inflation is, simply: an increase in the quantity of money caused by the government. A virtually equivalent definition is: an increase in the quantity of money in excess of the rate at which a gold or silver money would increased. These definitions are virtually equivalent, because without government interference in money over the course of our history, the supply of money today would consist mainly or even entirely of precious metals and fully backed claims to precious metals. Reisman, G., *Capitalism: a Treatise on Economics*, Jameson Books, Ottawa, Illinois, 1996, p. 217.

[*I agree.*

[*Inflation is here. It is reflected in gold and the markets, and oil is on the rise. It was reflected in the latest happy GDP numbers because the correction for inflation was too small. We now see inflation rising in consumer spending. It has not occurred in the CPI because the velocity of money is too slow, and we're still in employment shrinkage. Prices are going up while unit sales are going down, a net plus, not in real dollars.*]

Back to Planet Reality Wall Street guru, Meredith Whitney, said on CNBC today the Fed had increased purchasing of mortgage backed securities to bail out Fannie Mae and Freddie Mac. The Fed has gone from zero percent of their balance sheet to 30% of their balance sheet buying up mortgage backed securities in place of the 2 collapsed quasi-federal Freddie and Fannie (no Federal influence on the Fed there then!) because nobody in the private sector will touch the stuff!

[*RSJ: Obama has not come to grips with the problem to repair it. The bubble that burst was not housing, and not even subprime mortgages, or bundles of them. If the agencies had rated them B or less to begin with, the collapse would not have occurred. The bubble that burst was the rating system, through a combination of incompetence, breach of fiduciary duty, graft, and fraud involving the highest levels of government. Financial instruments defy evaluation when AAa, for example, is meaningless. The crash was manufactured and criminal.*]

Whitney predicts a 'W' shaped recession (a 2nd stock market correction to come). That should be due mighty soon as the Japanese stock market peaked in Sept, Canada and Australia peaked in Oct and the US and UK markets reached new highs today along with an all-time high for Gold.

Bernanke is supposedly a 'student of the (1929-33) depression'. I can't imagine anyone who's learnt less from past mistakes or with bigger blinkers on right now!

[*RSJ: The lesson of the Great Depression if nothing else was that spending couldn't fix it, and a global war with all the waste it generates couldn't fix it. What ended the Great Depression was a pent-up demand coupled with a huge increase in the labor pool, a massive tax reduction, and an incredible cut back in government spending.*]

Meanwhile The Huffington Post writes the lack of scrutiny amongst doting economists of the economic vandalism of current Fed (and US Gov't) policies is due to them being on the Feds direct and indirect payroll. Sounds very familiar with climate 'science'.

http://www.huffingtonpost.com/2009/09/07/priceless-how-the-federal_n_278805.html

[*RSJ: The article has a lot of clinkers, and skipped the obvious in the 2007-8 crash. The lengthy part about how the Fed has become an academic institution, and how the journals have become compromised is indeed parallel to climatology.*

[*The article appears to be a justification piece for the left to bring the independent Fed under the control of the administration, a process already underway judging by media reports.*

[*The task of the Fed is impossible, and its reactions unbelievably ill-advised. Congress decides tax revenues, and the administration, spending. Then the Fed gets the task of covering the excess of spending over taxes by borrowing, i.e., increasing the money supply. If it allowed the auction for treasuries to proceed freely, inflation would be immediately apparent in treasury yields, the basis for commercial interest rates. Instead, for the purely political objective of keeping inflation hidden, it is buying treasuries for its own account to hold down yields.*

[*This is another case of not being mindful of the past. The Fed did the same thing in the late '60s to mid '70s. This caused negative real interest rates and a bubble of runaway private spending. One is a fool not to borrow when the real interest rate is negative. When the process got out of control, as it must, the Fed let go, stopped buying-down interest rates, and dumped its holdings on the market over about a decade. It precipitated the Carter crash that took about a decade and a half of rebuilding of the economy. As soon as it let go of its end of the rubber band, real interest rate suddenly appeared, and accounting rules sent everyone's portfolios into the dumper. This was quite analogous to what happened when the three rating agencies withdrew their fraudulent subprime ratings. In the '80s the S&Ls failed, and then the banks, too, and both had to be bailed, although the methods were different. Capitalism runs on low interest rates.*

[*Obama, coupled too tightly with the Fed and getting tighter, is creating a financial crisis of unimaginable proportions. He is spending us into hyperinflation, and whatever Bernanke's background, he is a creature of politics and a student of social theory over experience – in short, an academic.*

[*The Huffington Post piece is a pretty good critique of the academics, but fails on the substance.*

[*When the real inflation rate becomes too apparent to ignore, the world will enter the next wave of the current recession, Great Depression 2. First the world's GDPs will take a hit for the real correction for inflation, and then interest rates will soar, causing the present value of everything to drop, and depreciating all capital holdings.*

[*Cutting back on CO2 emissions is going to occur, but not because of Kyoto or Cap & Trade, however they turn out. It's coming to pass because Obama is applying the brakes to capitalism, the bugbear of his belief system. He's strangling the goose.*]

Posted by John, Channel Isles | November 16, 2009 2:37 PM

John, Channel Isles wrote:

0911171214

Dr G,

You say Obama is "strangling the goose". Not only through taxation to repay but today they launched the Fraud in financial services quango, only a week from the Bear Sterns staffers clearing their names from fraud. And that was the States best case to nab misrepresentation with all the other cases now on ice (or thin ice!).

[*RSJ: By "strangling the goose" I wasn't thinking about interference in the financial markets so much as killing the goose that laid the golden egg, capitalism. It is merely one more aspect of Western culture with which Obama is indelibly unfamiliar.*]

The London stock exchange had operated for over 100 years without any regulation perfectly well up until 1986. A free market with zero need for public sector cretins oversight. One industry is free from all regulation, laws, lawyers, Gov't mangling, health and safety horseshit yet delivers £$billions of high quality product to consumers through a network as robust and flexible as the internet. It's the drugs industry. Cannabis alone is the largest cash crop in America. Larger even than corn or wheat.

This free unfettered market is even attacked by Gov't yet still delivers day in day out. Not a single jail in America or Europe is free of drugs. The States 'War on Drugs' is a slaughter of the authorities who are so dumb they're thrashed before they can even find the battlefield. And it gives the lie to socialists who claim free markets don't work. Drugs runs rings round the State and all their excuses for Law and regulation. Industry and consumers in near perfect harmony, the State is not needed, the market solves all problems that are needed to be solved.

[*The U.S. has managed to corrupt drug enforcement by giving it a profit motive. By confiscation and asset-forfeiture it has an interest in keeping the trade viable. To the business, it is an affordable tax. I suppose if someone understood capitalism he'd never be a legislator.*]

Returning to the stock market here's an interesting Financial Times article which proposes being financially conservative was a selling point before regulation. Since regulation taking risk has been the order of the day.

http://www.ft.com/cms/s/0/49310344-cfb6-11de-a36d-00144feabdc0.html

[*RSJ: A few observations on the article:*

[*Re "government signals that some banks are too big to fail", they signaled they are too big even to get sick. Goldman Sachs, JPMorgan, Citigroup, and others got early distribution of scarce H1N1 vaccine.*

[*The complexity in banking can be laid at the feet of MBAs, an institution dedicated to maximizing cash flow for a rake-off of the action. It is quite like Ebola, a virus that kills its host. Michael Milken in one sense was case zero. He showed how corporate credit and seed money, ostensibly accumulated for new products and services, could be extracted as cash for personal fortunes, leaving debt-ridden shells for corporations and an issue of junk bonds for the suckers. CEOs, once the victims, are now the perpetrators. This is now the rule rather than the exception in American public corporations, and a major disease. It is the new strategic plan.*

[*Securitization and high risk loans were not bad in themselves. The problem was that bonds and derivatives backed by the high risk loans were rated AAA, sold at a profit to the raters, no doubt. They might have been below investment grade, but the three credit rating agencies won't reveal their rating scheme. Regardless, the risk was concealed by the agencies through public deceit, and threats and payoffs to Congress, including Senator Obama. The agencies might argue that they assumed the federal government was guaranteeing the loans through Fannie and Freddie, but in the end what they did was a cataclysmic breach of fiduciary duty. We still can't evaluate portfolios. I disagree with the article that the problem lies in ethics. What was done was criminal, but who's to prosecute? It's the perfect crime.*

[*When after a couple of years bond failure rates began to materialize around 10% instead of a fraction of 1%, the agencies precipitated the crash by rescinding their ratings instead of letting the market work it out. The effect was almost instantaneous for subprime instruments, but quickly spread to all rated instruments. Unfortunately, this happened on the watch of Bush '43 and Paulson, a matched pair of Harvard MBAs. They could see nothing wrong in the complex structure.*

[*Obama is not the only enemy of capitalism.*]

A hard bitten market trader/analyst said on CNBC today we have consumer spending tightening and consumers and corporates reducing their debts. Meanwhile we have Gov't and local States increasing spending and digging debt holes even deeper. The 'body politic' have in effect bet all their chips on stimulating the consumer and corporate sectors to recover in the somewhat vein hope they'll be repaid maybe sometime (maybe never!) in increased tax receipts. The trader can't see the 'bet' paying off. He can only see a crunch (train crash)!

And today we have Don Cohen pounding the table (banging out in stereo the Feds drum beat of yesterday) that the Fed is not responsible for credit bubbles. The Fed has amassed many cronies to sing their song and crowd out reality with white noise.

[*RSJ: Obama is bent on replacing capitalism, the creator of wealth, with socialism, the consumer of wealth, and doing so during a financial crisis. Our federal government spending creates short-lived pools of wealth, the very thing that socialists, traders (e.g., Bernie Madoff), MBAs, and other thieves target through redistribution and confiscation. What the economy needs is income to be deferred for capitalist risk taking, the seed money, and to create purchasing power among consumer groups. The commentator on CNBC left was quite right, but left out that government is also raising taxes. Recovery requires reductions in both government spending and tax rates.*

[*Debt in itself is not bad. A grave problem arises whenever the debt servicing can't be paid. The U.S. is on the fast track to that point. It's a double debt whammy. Debt principle is soaring, while high interest rates are just over the horizon. We're heading for a crash in treasuries. We're in a deep hole and digging furiously with both hands.*]

Posted by John, Channel Isles | November 17, 2009 12:14 PM

John, Channel Isles wrote:

09111181132

There are many ways to strangle capitalism, including the private educational route of Harvard teachings you mention where you turn a business into an asset to be stripped of profit to enrich the executives (and in General Motors case, the UAW Union), instead of an asset to be built upon.

[*RSJ: As a former GM exec and retiree, I can testify to the demise of GM going back a half century. The corporation was organized wrong, especially with regard to the role of the dealerships. The federal government made labor costs and the cost of money way too high. The planning horizon (break even point) of a company is approximately the reciprocal of the annual interest rate. For the Japanese, the rate was government subsidized and negligible; for the U.S., it was for extended periods perhaps 15% to 20%.*

[*The Japanese government had a 30 year horizon for its business model to take over the auto business through product quality. The US government had a plan to make the auto industry a social service. GM had a rush plan to tweak tail lights each year, and sell autos with an intoxicating aroma that needed to be rebuilt at the dealerships. The story of GM ought to be the half century, on-going story of Mr. Goodwrench. If you can't fix it, feature it, as marketeers used to say. At the moment I can think of nothing more preposterous than an auto advertising campaign featuring getting the cars repaired!*

[*Unless it's cutting back on CO2 emissions, that is. Or stimulus spending. We're asea in stupid.*]

Obama today ordered a task force to fight financial crime on the heels of US Treasury Chief chump, Timothy Geithner, at yesterdays press conference. Great slight of hand no doubt to steal headlines away from today's really big story, that the US Gov't is reported to have 'misappropriated' $98bn of Gov't pay outs (taxpayers hard earned) in 2009, up 30% on 2008, twice the amount 'misappropriated' by Bernie Madoffs' estimated $40-$60bn heist. As you say, the Gov't commits the "perfect crime" every time because the authorities are Teflon coated Turkeys who'll just never vote for Christmas or call their activities criminal. Shoulder shrugs and waffle will fill in the cracks!

http://www.ft.com/cms/s/0/d0861182-d3de-11de-8caf-00144feabdc0.html

Peter Orszag, director of the White House Office of Management and Budget, said every over-spend "… is a dollar that is not available to helping an unemployed worker or to investing in education." So there you have it. Even if they made savings, they'd not pass a penny back to the taxpayer, just find another channel to spend it in! So no tax cuts for as far as the eye can see … .

… except Obama in China today, in a rare interview on the only right wing TV channel in the US, FOX, said he's at work with his team at cutting the budget deficit. That must warm your heart Dr G?

[*RSJ: I'd sooner believe the reports that he's working on another trillion-sized "stimulus".*

[*Fox News Channel (FNC) has some good points, and some bad. I don't think a one of their commentators, though, can make the distinction between the US, a religious nation, and its secular government that guarantees our religious freedom. They confuse religious freedom with denominational freedom. It's pitiful. The Republicans have enough material to throw out the Democrats for a decade or two, but, alas, no leader. Leader by default gets you another Obama. To do the job, the GOP needs to assemble the clichéd big tent. FNC would make it a revival tent. The latter needs to fit tucked away in the former.*]

Obama goes on a waffle tour of Asia and all they do is hold up a mirror and tell to go home and sort his sh*t out poor sod!

http://www.ft.com/cms/s/0/ee761ae2-d443-11de-990c-00144feabdc0.html

The FT article states Obama's tour to China was being presented by some as "… that of a debtor visiting his banker". Do you believe Obama has taken on "fiscal responsibility" to heart or have the credit rating agencies had a quiet word about the US losing its AAA rating very, very shortly as I believe was responsible (but never made public) for Brown in Britain's mega U-Turn on spend, spend, spend?

[*RSJ: I don't buy the popular banker model for China. They buy our treasuries because they are soaked in cash, thanks in great part to slave labor and a free ride on the free market gravy train, and because the yield was attractive. They don't buy bonds out of the goodness of their hearts. China is now skewered on a three-horn dilemma. Inflation is destroying their stash, treasuries are losing their glitz, but to the extent they stop buying them, their yield will go down even faster. We may be joined at the waist. And inflation can be measured by the rate of return on treasuries. The T-bill indicator lags gold by only a little.*

[*Sorry, not up to speed on the machinations with Brown. I doubt that Obama or his people are talking to the credit rating agencies about much of anything. The agencies are a secretive bunch. They don't even pay their bribes directly. You're right to characterize the looming treasuries crisis as the loss of AAA, but that would be a responsible outcome. Obama appears to have no concept of fiscal responsibility, or foreign responsibilities. His strength is in the teleprompter, a pretty face, affirmative action, and socialism. And CO2.*]

Posted by John, Channel Isles | November 18, 2009 11:32 AM

John, Channel Isles wrote:

0911191259

I've a feeling the wise, noble and liberal decision to try K.S. Mohammed in the Big Apple will blow up in the Obama Administrations idiotic faces. This is going to be a clown show of epic proportions in a country weary of war and sick of Big Gov't spending (the legal bill alone will enrage even floating liberals).

[*RSJ: My bet is that KSM won't get the big exposure because he'll never go to trial. The case will be dismissed on pre-trial motions. Of course, the media will be waiting on the courthouse steps to stick microphones in his face.*]

And as KSM has admitted his guilt middle America will be keen for someone to be convicted. The undoubted toys out of the pram of the defense will just get right up everyone's noses and rub everyone up the wrong side of mad with a travesty trial. Obama, like all liberals, has made the wrong decision.

[*RSJ: Unless KSM gets stuck with an attorney no more competent than Scooter Libby's, his prior confession will be inadmissible because of duress. At the time, he was still in fear of being waterboarded so he confessed to everything asked of him.*]

His aim is off target because as Dick Morris said last night, Obama's psyche is to be seen as a citizen of the world, not rule as an American. Obama wants to be seen to be 'fair' as seen by a convergence of world opinion at a nominal meeting point somewhere mid-Atlantic or mid-Pacific (maybe Mauna Loa!)

[*RSJ: Maybe. Or since he cozies up to the dictators around the world, he just wants to be not a citizen of the world but a dictator like*

them. His bowing to foreign potentates and apologizing for American free enterprise and defending freedom certainly casts him as un-American.]

Look at the stick he gets when he doesn't tow the global liberal (European socialist) line:

http://greenhellblog.com/2009/11/17/der-spiegel-lambastes-obama/

[*RSJ: Before Obama gets around to his domestic socialist agenda he's going to cause a worldwide financial crisis. This will eclipse any concern about trade, or wars, or climate.*]

German newspaper Der Spiegel on Copenhagen falling to bits says "the blame will lie squarely with Obama…" and "Barack Obama cast himself as a citizen of the world …he was dishonest with Europe".

It's official. Obama is just not European socialist enough!!

[*RSJ: He seems more Soviet to me (and you can throw in Afghanistan), but I haven't had to live under a European socialist. At the moment he's paralleling Putin while pummeling the treasury, and the latter will prevail. He will lose both houses of Congress to veto-proof majorities in 2010, and the Presidency in 2012. Count on it. The man is circling the drain. The question is how much is going to drag down with him.*

[*How much of what he is doing is irreversible? The spending cuts and roll backs to resurrect the dollar are going to be painful, but the tax rate cuts will be most welcome.*]

Posted by John, Channel Isles | November 19, 2009 8:25 AM

John, Channel Isles wrote:

0911191931

I heard a couple of weeks ago on FOX the American Physicists Association had a mutiny. The Committee 'went rogue' as most scientific committees seem keen to do and without a vote of their members declared their Association was putting their weight behind AGW to which about 160+ physicists/members hit the roof over. Do you know about that as I couldn't find any follow up on the web?

[*RSJ: It's the American Physical Society, and Watts Up With That? carried a decent news story on 11/13/09.*

http://wattsupwiththat.com/2009/11/13/american-physcal-society-rejects-climate-policy-plea-from-160-physicists/]

What's it like to live under European socialism? It's like having your nanny come in, lift your pillow and steal your money left by the tooth fairy then having stolen your money suffocate you of all life!

You should know anyway, your President, Franklin D. Roosevelt, drained your economy of all its power, wealth and vibrancy in the 40's. Something European socialists still look back on with much admiration at "The New Deal" of Gov't run everything and the warm glow of socio-economic vandalism and decrepit living standards lefties bask in.

[*RSJ: You have given me a bit of a model for the European socialist, but FDR gets a walk on the charges. He was handed a crisis, unwittingly exacerbated it, only to drive it deep into the worldwide Great Depression. In the '30s we hadn't developed a viable understanding of economics or of large scale modeling. FDR created a raft of agencies, our alphabet soup, many of which were either DOA or found unconstitutional. He tried to stack the court to get around his constitutional defeats, but thankfully failed at that unconstitutional attempt. Along came Keynes to write a treatise to justify government spending to solve the Depression. FDR tried it with his 1937 recover program, only to worsen the situation. But, my, didn't he look and sound presidential all the while?*

[*Even WWII didn't solve the Depression. During the War, the government was indeed deep into our lives on every front, thanks to a great extent to strict price and wage controls, rationing, and censorship, all tolerated under the guise of a total war effort. Sometimes when you're desperately ill the best thing to do is stop all prescriptions and get a new baseline. That's what we did as the war came to an end, and lo, what we had had all along was a bad reaction to the medicine.*

[*In context, the FDR story and the end of the WWII should be the lesson for today. But Keynes and Marx comprise the doctrine of the left. It's a formula for power, and a cancer inherent in democracies. We have to remind ourselves continuously of the difference between the socialist program as it works in practice, and as it is advertised to work, its propaganda. Equality of outcome is only for the proletariat, certainly not the leaders, and that equality is achieved only and ultimately at the subsistence level.*

[*The legacy of FDR needs to include much of the world left in slavery under a century of Communism. General Patton was right. We shouldn't have quit at Germany.*]

And you've had a year under Obama. Just project him forward 11 more years and you've got Britain under snake-oil salesman Teflon Tony Blair and our now rotting Scottish carcass, Gordon 'bankrupt' Brown. Imagine all private wealth being siphoned into Gov't coffers (US Gov't takes 25% of GDP, in Blighty its over 50%) then siphoned into propping up creaking, bankrupt , non-performing health and welfare, public transport, the Marxists at EU/EC and public-private scams. The correct economic term for our status is "we're f**ked!"

[*RSJ: I'll give you all that, but Obama is in the process of destroying our currency. This will have worldwide consequences. Besides the financial problems that that creates, the U.S. is the major marketplace for goods, and the last bastion against anti-Western, totalitarian*

movements. These will end to the extent Obama is successful.

[*The U.S. needs to immediately stop reckoning the cost of government programs in terms of a decade of then-year dollars. Normally, we should calculate in terms of present value, but that becomes rather meaningless under hyperinflation. So right up front, the U.S. needs to get a grip on a meaningful definition of inflation and stop it first.*]

That's not fair as Obama is attempting to achieve in barely a year what took Labour a decade (and Labour had all the building blocks of the socialist State in situ). The rate of 1,000 page legislative bills to pass, without opportune to read them, is remarkable. Labour and the EU fascists have taken 10 years to produce 2,600 new Laws on how Big Brother demands you behave or its a criminal record for you Comrade. The average London citizen now gets photographed 450 times a day by spy cameras. Opposition MP's get arrested under terrorist Laws for accepting Gov't leaks. A Brazilian electrician was shot for running along a Tube platform. A market trader was fined £2,000 for being a willing seller selling to a willing buyer, for selling mixed peppers in a bag and not under European Law of weighed in kg's.

[*Obama is working on a scale beyond your examples to install a system that has no reasonable prospects of working.*]

This is why the drugs industry is so appealing to me. It's the only sane way of doing business left in Europe! Small businesses here spend 7 hours a week just filling out Gov't forms, on red tape and compliance with rules, Regs, laws and taxes. In Italy the black markets are estimated to account for 40% of GDP. The black market is sanity. Anyone doing legit business is a bloody mug!

I agree the Republicans, despite being leaderless and under-funded by a large margin, should walk the 2010 elections and bet 6 months ago a very astute biz buddy of mine Obama won't get re-elected. Our body politic has become truly socially and economically dysfunctional (destructive). Do you think the GOP gets it or will it be lip service?

[*The U.S. has no responsible way to elect its party leaders. We had a constitutional protection called the Electoral College. It was supposed to accomplish this:*

> Talents for low intrigue, and the little arts of popularity, may alone suffice to elevate a man to the first honors in a single State; but it will require other talents, and a different kind of merit, to establish him in the esteem and confidence of the whole Union, or of so considerable a portion of it as would be necessary to make him a successful candidate for the distinguished office of President of the United States. Hamilton, Federalist Paper #68.

[*Instead the Electoral College has become a cumbersome way for the president to be selected in a popularity contest. It should be unconstitutional for a candidate for president to have his name on a ballot, or for an elector to pledge his support to a candidate. We also have a problem with the left take-over of the Fourth Estate. As a result, our government is on a perpetual random walk: throw the rascals out in exchange for a fresh empty suit or worse.*]

Posted by John, Channel Isles | November 19, 2009 7:31 PM

John, Channel Isles wrote:

0911210130

Briefly back to science, er no sorry it's bloody politics again as news of hacking into the AGW crews emails broke out …

[*RSJ: Thanks for the tip. I'll watch the development with interest, but from a distance. The validity of the hacked emails is troublesome, I don't want to encourage hacking by exploiting it, and the story should be immaterial to Cap & Trade or the Kyoto Accords. So I'll keep the rest of your post private, if you don't mind.*

[*The AGW model should stand or fall on its own merits as a matter of science. The model is polluted with bad science, which is testimony to the rich amalgam of gullibility and politics that passes for science at IPCC and among the journals, blogs and authors that promote the fraud. Mucking about in stolen correspondence creates a vulnerability in the science and is a distraction.*

[*The hockey stick, which is the topic in your samples, remains a stain on the reputation of Mann and Jones, IPCC and realclimate.org, and a trophy for the skill and perseverance of McIntyre and McKitrick and ClimateAudit.org. The hockey stick is history -- no longer relevant to the AGW model. IPCC discarded the stick, and timidly resurrected the real data representing the Medieval Warming Period and the Little Ice Age.*

[*Regardless of economists turning up the heat on shutting down human activity, or believers turning up the heat on the warming catastrophe, the former does not cause the latter to any measurable extent, no matter how high the costs. This should not be a war of fear. The model is invalid as a matter of science.*]

_____ ◆ _____ on a Russian website, 'The Air Vent', of some mighty embarrassing emails about fixing and "tricks" with temp data from the now 'in denial' (ironic or what!) University of East Anglia's Climate Research Unit.

http://noconsensus.wordpress.com/2009/11/19/leaked-foia-files-62-mb-of-gold/

Some cringe worthy as well as insidious e-mails are attributed to Philip Jones, the Director of the CRU; Keith Briffa, his assistant; Michael E. Mann of the University of Virginia; Malcolm Hughes at the University of Arizona; and others. One such e-mail makes references to the famous "hockey-stick" graph published by Mann in the journal Nature:

"I've just completed Mike's Nature trick of adding in the real temps to each series for the last 20 years (i.e., from 1981 onwards) and from 1961 for Keith's to hide the decline. Mike's series got the annual land and marine values while the other two got April-Sept for NH land N of 20N. The latter two are real for 1999, while the estimate for 1999 for NH combined is +0.44C wrt 61-90. The Global estimate for 1999 with data through Oct is +0.35C cf. 0.57 for 1998."

Another corker is Michael E. Mann wrote:

Dear Phil and Gabi, I've attached a cleaned-up and commented version of the matlab code that I wrote for doing the Mann and Jones (2003) composites. I did this knowing that Phil and I are likely to have to respond to more crap criticisms from the idiots in the near future, so best to clean up the code and provide to some of my close colleagues in case they want to test it, etc. Please feel free to use this code for your own internal purposes, but don't pass it along where it may get into the hands of the wrong people.

The news broke here: http://www.examiner.com/x-28973-Essex-County-Conservative-Examiner~y2009m11d19-Hadley-CRU-hacked-with-release-of-hundreds-of-docs-and-emails

And even broke out in the scam sheet, The Guardian, who wrapped the dishonest fixes in cotton wool, soft pillows and lots of counter-truth white noise, white lies and of course their usual white wash: http://www.guardian.co.uk/environment/2009/nov/20/climate-sceptics-hackers-leaked-emails

We've known it for years. These creeps are nothing but frauds

Posted by John, Channel Isles | November 21, 2009 1:30 AM

John, Channel Isles wrote:

0911210241

And here's the fob off by the hacked and exposed Bob Ward, Policy and Communications Director at the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science. "Political" Science sure is a perfectly accurate job description.

http://www.guardian.co.uk/environment/2009/nov/20/climate-sceptics-email-hacking

What I love is Ward's total ignorance about sea levels. He just doesn't know this is a busted flush, he's a long way behind the data curve, and still regurgitating yesterdays washed up propaganda with, "They also have not managed to make melting glaciers and rising sea levels, or any other evidence of warming, disappear into thin air".

Maldives sea levels rising not sinking. Worlds leading sea level expert says, sea level rise is 'The Greatest Lie Ever Told' http://tinyurl.com/d4zayx

Bangladesh Adds 20 km's per year, Not Sinking http://afp.google.com/article/ALeqM5g-8geW6xzl7Ik-UWrFBtq66ybN4A

Falling Sea Level upsets theory of global warming http://tinyurl.com/dah5o4

Money Fuels Maldives Sea Level Rise http://www.larouchepub.com/eiw/public/2007/2007_20-29/2007-25/pdf/33-37_725.pdf

Arctic Sea Level Dips 2 mm http://news.bbc.co.uk/2/hi/science/nature/5076322.stm

Oceans to Fall, Not Rise, Over Millions of Years http://www.reuters.com/article/idUSL0636899020080306

As for Mr. Ward's rubbish about "melting glaciers" Antarctica is now a busted flush. 100 years of zero temp change despite 10 years of shrill media hyper-bollox from the its western tip where it juts out into warmer oceans causing melt and ice cliff collapse. Even the IPCC temp charts now admit it is natural variability, not AGW. So the propaganda crews have moved North to the Arctic to beam their shrill stories about melt which are also proving to be warm ocean and warm air circulation changes, again not AGW.

Ward should be sacked. Period.

[*RSJ: Why bother ourselves and the public about the degree and distribution of global temperature changes? It's an academic exercise for climatologists. It's a boring subject in light of the fact that man has had no effect on climate.*

[*Ward is rather unknown in the U.S. His Guardian article is titled, "This climate email-hacking episode is generating more heat than light", subhead: "Another skirmish has broken out in the long-running battle between climate scientists and so-called sceptics, and this one is likely to lead to more public confusion". I must lead a sheltered life because the news about hacked emails had not reached me. Ward casts doubt on their validity, and I will choose not to contribute to sharing hacked email, legitimate or otherwise. Also, Ward says that a personal attack is underway on Mann and Jones, and I wouldn't want to contribute to that, either.*

[*On the other hand, Ward puts his bias right up front in his headlines. The battle is not between climate scientists and skeptics. Even IPCC's Dr. David Karoly in the Great Global Warming Swindle Debate staged by Australian Broadcasting Corp., asserts all scientists are skeptics. He calls himself a skeptic, while admitting to the contrary: he claims certain knowledge that GHGs caused the recent warming spell, and that it was "definitely not changes in solar irradiance, changes in the Sun."*

[*AGW supporters call those who point out their errors, "deniers". That is a good word. We should characterize the battle with symmetry,*

as being between deniers and believers. AGW is a belief system, a religion just missing its god. It turned into a belief system when the AGW conjecture failed to fit all the facts. The model fell off the bottom of the scale for scientific models: conjecture, hypothesis, theory, law.

[*Ward understates the importance of the hockey stick, its ultimate disposition, and its lingering implications. He says, "This graph appeared prominently in the landmark Third Assessment Report". More than that, IPCC used the information in that graph to discount officially the existence of the Medieval Warm Period and the Little Ice Age, at best relegating them to regional irrelevance. McIntyre discovered that Mann and Jones' data reduction in creating the hockey stick was (a) faulty, and (b) selective in the data reduced. The first is embarrassing to the authors, the second, professionally discrediting. Based just on the faulty part, IPCC removed the Hockey Stick construction in its Fourth Assessment Report, and weakly rehabilitated the MWP and LIL. Ward doesn't acknowledge McIntyre by name, but lumps him into the bin of castigated skeptics, i.e., deniers. He also doesn't recognize the data fraud discovery, or IPCC's admission in taking corrective action.*

[*Even with the Hockey Stick removed, IPCC and its supporters fail to understand their own graph of temperature over the past millennium. They raked Martin Durkin over the coals for reporting in The Great Global Warming Swindle (TGGWS) that contemporary temperatures had been exceed in the MWP. They animated his graph by tacking a dubious version of current temperatures on the end. Regardless of Durkin's general protestation that he should not have arbitrarily tacked a bit onto the end of someone else's graphs, his critics and IPCC were wrong. First, IPCC should not simply compare modern instrument records with previous technologies and proxies by ignoring their differences and by secret calibrations that it uses to make them all fit together. Differing records may be graphed together, but not fitted together. That is elementary scientific ethics.*

[*Perhaps more importantly, the critics should never directly compare past filtered (smoothed) data with modern, instantaneous (not smoothed) readings. IPCC's temperature record for the past millennium is smoothed over about 20 years, although a 30 year period would have been better. The effect of smoothing is to reduce variability. Smoothing removes the highs and lows, replacing them with a longer term average of sorts. The Swindle critics made a bone-headed, mathematical error.*

[*The Great Global Warming Swindle should be rehabilitated in spite of a few warts. To compare apples and oranges, or better hops and grapes, the current temperatures are known to be colder than those in the MWP by comparing, as the documentary did, the crops grown in Greenland then and now, and the wine produced in the UK then and now, bearing in mind the effects of more hardy grapes today. Either that or smooth the current temperature records over a similar 20 or 30 year period before comparing them with the thousand year reconstruction including the MWP.*

[*Ward needs to research his subject matter much better.*

And presumably because 11 years of cooling is a bit of a bugger in the rhythm of the AGW drum beat, Gavin Schmidt is reaching out to less scientific journals (The Edge) as "… scientists and other thinkers in the empirical world (cough) who, through their work and expository writing, are taking the place of the traditional intellectual (splutter) in rendering visible the deeper meanings of our lives (puke) redefining who and what we are" (pass the sick bag!).

http://www.guardian.co.uk/environment/blog/2009/jul/06/gavin-schmidt-climate-change

Schmidt smoozies, "I don't advocate for political solutions... My advocacy is much more towards having more intelligent discussions, which is completely naive and stupid and I realise that". So at least he realizes he's completely naive and stupid then!

[*RSJ: Gavin Schmidt's idea of an intelligent discussion is revealed in the **Journal** in the paper **"Gavin Schmidt's Response to the Acquittal of CO2 Should Sound the Death Knell for AGW"**. The paper answered his snide remarks about the **"Acquittal"** categorically, and he has yet to respond. He is in over his head, and demonstrates a pronounced preference to argue ad hominem ("contrarians" being a favorite tag).*

[*By the way, Gavin Schmidt's realclimate.org is a valuable resource for technical information and discussion on the UN's approach. It faithfully supports and expands upon IPCC's erroneous modeling, conclusions, and politics.*

[*On the technical level, the cooling over the last decade should **not** be treated the way the Swindle critics wrongly used the modern record to "debate" (no one was present at the debate who had worked on the documentary) climate change. At present, the recent cooling is a weather trend, counting roughly one part in three with the previous two decades. Still, we should relish this current weather phenomenon to the extent that it cools the political ardor for the fictional and discredited Anthropogenic Global Warming model.*

[*The on-going cooling will work a progressive hardship on people, but especially and deservedly on the modelers, the catastrophists like Schmidt and Hansen and the IPCC followers.*

Posted by John, Channel Isles | November 21, 2009 2:41 AM

John, Channel Isles wrote:

0911210839

"HACKERS 'EXPOSE GLOBAL WARMING CON': Sceptics claim that leaked emails reveal research centre massaged temperature data.

That's the headline for the story at the Daily Mail which is on the newspaper's website front page. Some nice choice public

comments, too, -- 60% of Brits don't believe a word of it despite a decade of Gov't propaganda pumped down our throats 24/7

This just might be the straw that breaks the camels back. And fitting too that it's in the UK, as the global warming junk science was fabricated here by our Prime Minister, Margaret Thatcher, who funded the Carbon Trust to fabricate the story of smoky coal stations to defeat the coal Unions.

A straw to break the camel or yet another nail in the AGW coffin. Who cares, its a great news story :))

[*RSJ. Yeah, it's great theater, and it is beneficial because it raises public skepticism. But would you want CO2 reductions imposed based on a balancing of the conduct of believers and deniers? IPCC did something far worse. It stood as a group of scientists to sound a public alarm over CO2, based on models that had not been validated, and persists to this day after the models have in fact been invalidated. IPCC should be put on public trial, and if Gavin Schmidt and James Hansen want to join as co-defendants, so much the better.*]

Posted by John, Channel Isles | November 21, 2009 8:39 AM

John, Channel Isles wrote:

0911211904

This is a political animal Dr. G and has been right from the start of Maggie Thatcher funding the Carbon Trust. The only irony is not scientific but the political twist that the so-called 'right' fabricated it to destroy the left's Union base and that the left, buried for dead in the populism Reagan and Thatcher, then brushed up on their PR skills, put on the pretense they would respect the free market and looking dapper, conned their way back into office. Once there the socialist scum returned to type (Tax & Control).

Why this University of East Anglia's Climatic Research Unit scandal is so important is for its political embarrassment potential. Being caught changing figures is always a game changer, whether they be temperature data or cooking the books. This is a political bullet into the side of a political animal. Scientific heavy canons change nothing with this party political beast.

There's almost zero science giving this beast legs. It's purely politicians funding their cronies to paint a picture. It started with Thatcher then the European and American socialists saw the huge potential and 'value' of funding its growth.

When the history of AGW is written, the science may get a look in as a starter dish. But the main course and desert is pure politics. The dishonest global mess that AGW has become can only be made sense of, only be sanely described, through a political perspective.

James Hansen when his "1998 the hottest year in recorded history" was found to be little more than a Y2K bug said, "it's not about the data, the political message is the most important thing." The cretin (political animal) Hansen summed it up totally accurately. It's all about politics.

[*RSJ: My recommendation for a reliable history on the subject is Spencer Weart, "The Discovery of Global Warming",*
[http://www.aip.org/history/climate/co2.htm#N_34_

[*The Carbon Trust was set up in 2001 by the UK government as an independent company. http://www.carbontrust.com/EN/Home.aspx. What role did Margaret Thatcher play and how, considering that she was Prime Minister from 5/4/79 – 11/28/90? That she did is confirmed by Daniel Hannan:*

[http://blogs.telegraph.co.uk/news/danielhannan/5895815/Margaret_Thatcher_still_towers_over_her_critics/

[*The UK Miners' strike was 1984-1985, and Thatcher delivered her famous "enemy within" speech to parliament on 7/19/1984. The IPCC would be founded in 1988, with Bolin, a published alarmist, as first chairman.*]

[*Roger Revelle was a major player in the history who promoted himself the grandfather of AGW. He was more the grandson. He published a famous paper in 1957, co-authored by Han Suess, which is scripture among the believers. Their modeling, due mostly to Suess, failed. Their equilibrium equations produced "a too fast exchange rate" and "unexpectedly short mixing times". So they presumed a buffer factor to keep anthropogenic CO2 from being absorbed in the ocean. The buffer factor survived, however, and IPCC calls it the Revelle Factor. It is nonsense, requiring thermodynamic equilibrium in the ocean surface layer.*

[*Revelle was a promoter, the Al Gore of his time, and his major project in the mid-fifties was the International Geophysical Year. His '57 paper with Suess was a pitch for funding in case man caused CO2 and in case that CO2 caused warming. Revelle was also the major force behind funding Charles Keeling's CO2 measurements that began in earnest in 1958 and continue to this day. Those measurements are the backbone of the whole, failed AGW model.*

[*Revelle and Suess gave credit to T.C. Chamberlin (1899) and Arrhenius (1903) that CO2 caused observed climate changes. They next credited G.S. Callendar (1938, 1940, 1949) for the theory that nearly all manmade CO2 emissions accumulated in the atmosphere. They failed to credit Joseph Fourier who in 1824 published the greenhouse effect, as it later came to be known. We now know that the greenhouse effect is real, measured by the climate sensitivity parameter, but is a fourth to a tenth of what IPCC estimates, and far from critical. We know the atmosphere is conditionally stable, and not vulnerable to any kind of "tipping points" except natural cataclysms. We know that the atmosphere is regulated by albedo effects of clouds and the surface.*

[*But simply by reading R&S, we know their model was unsuccessful, and that they gave credit to scientists who long preceded them for their concepts. The believers fail to read anything but their bastardized journals.*

[*To his great credit, Revelle, the great^{5}-grandson of AGW, retracted his alarm in two 1988 letters to congressmen, and reportedly again in a speech given shortly before his death in 1991. He apologized.*

[*Apology accepted.*]

Posted by John, Channel Isles | November 21, 2009 7:04 PM

John, Channel Isles wrote:

0911230317

Two excellent articles in Britain's Telegraph newspaper today. The Telegraph exposed the MP's expenses scandal over here and are getting a name for themselves as crusaders of truth, rather than the Marxists of the BBC and Guardian who are dripping in contempt and lies (and drowning in declining viewers/readers).

"Climategate: the final nail in the coffin of 'Anthropogenic Global Warming'?" writes James Delingpole in the Telegraph today. The article sums up brilliantly and with total clarity the contempt, lies and fabrication exposed by the hacking of the University of East Anglia's Climate Research Unit.

http://blogs.telegraph.co.uk/news/jamesdelingpole/100017393/climategate-the-final-nail-in-the-coffin-of-anthropogenic-global-warming/

Telegraph gives a nice expose' of the media bias including MSM, BBC, New York Times and ABC in Australia:

http://blogs.telegraph.co.uk/news/jamesdelingpole/100017451/climategate-how-the-msm-reported-the-greatest-scandal-in-modern-science/

What is simply brilliant about the 'Climategate' scandal is that it draws a line in the sand between truth and un-truth. The Internet is now the arena where news is broken and debated. Old means of media bias and corruption can't contain the 'truth virus'. And it's drawing a line between people and bent Governments and bent media. The Internet public is very switched on and the comments on the stories demonstrate we're not easily led sheep but thinking smart human beings.

Hackers, don't you just love them? This story will run and run, right up to Copenhagen. A fantastic day for us all Dr G :))

[*RSJ: The Internet is the last repository for the virtues previously attributed to a free press. It is the salvation for corrupt technical journals. To be sure, the 'Net has a lousy signal–to–noise ratio, worse than the people on the street. But SNR is a measure not applicable to the media and the journals, where the signal is clean, just thoroughly biased toward collectivism.*

[*The hackers, though, are in the class of bottom feeders. If they manage to destroy the AGW movement, it will be a deserved fate and maybe justifying. After all, Hannah Giles and James O'Keefe are national heroes for exposing Acorn. Hackers vs. IPCC/CRU et al., is like the old gag about watching your mother-in-law drive off a cliff in your new Bugati.*]

Posted by John, Channel Isles | November 23, 2009 3:17 AM

John, Channel Isles wrote:

0911230430

"A former British police officer and Scotland Yard investigator of the IRA, Neil Sankey, is pursuing what he believes to be fraud on a gigantic scale — a conspiracy, no less, to infiltrate and destroy the free world by putting a foreign imposter into the White House.

…

"Sankey says his fascination began with the realisation that 'this man wasn't what he said he was. He wasn't an ordinary Democrat — he was far more extreme than that.' So about a year ago he began reading blogs and websites that claimed to expose Obama's foreign roots, his spurious Hawaiian birth certificate and the $2M White House cover-up that has prevented the public finding out about the plot.

"'It's quite obvious to me — America is heading towards a socialised state just as has happened in Europe. Socialised medicine, everyone on the dole, and when everything collapses you tip the scales into Marxism.'"

http://www.guardian.co.uk/world/2009/nov/22/barack-obama-british-conspiracist

[*RSJ: This is the story the American press quickly dismisses by labeling nose-holders with the invective "birthers". The story does seem to have legs, and may actually be progressing in court. E.g.*

[http://www.ireport.com/docs/DOC-346284

[*What name do they have for people who simply believe the Freedom of Information Act should apply to satisfy a mere curiosity?*]

Posted by John, Channel Isles | November 23, 2009 4:30 AM

John, Channel Isles wrote:

0911240532

The carnage from the University of East Anglia CRU hacking continues. A great article in the Financial Post entitled CRU's climate 'tricks'. From the first paragraph the heavy guns are piling shot into this rotting AGW beast;

> (Quote) In the case of the apparently scandalous leaked e-mails from the Climatic Research Unit in England, it's all a matter of getting the context right. That's what Prof. Michael E Mann, the fabricator of the celebrated hockey stick graph, told the Washington Post recently — that skeptics "are taking these words totally out of context to make something trivial appear nefarious."
>
> Let's look at the context of a couple of these e-mails. Here's one that looks pretty bad until you understand the context: From: Ben Santer To: P. Jones, Oct 9, 2009. Subject: Re: CEI formal petition to derail EPA GHG endangerment finding with charge that destruction of CRU raw data undermines integrity of global temperature record: "Next time I see Pat Michaels at a scientific meeting, I'll be tempted to beat the crap out of him. Very tempted."
>
> Now let's put that in context. Dr. Ben Santer is a researcher at the Lawrence Livermore National Laboratory in California. In the Intergovernmental Panel on Climate Change's Second Assessment Report (1995), he was the lead author of a chapter and cleverly cut off the early and later years of a dataset, so that the resulting graph would show that global temperatures were only going in one direction in recent years–rapidly upwards. In fact, temperatures were just as high in earlier years and had declined in the most recent years, but that data at both ends was cleverly deleted. This made the graph much easier to understand correctly. So the first bit of context is that Dr. Santer is an outstanding scientist of fine and upstanding character. (End Quote)

And the article just piles in even heavier shots from there. The truth virus is out there on the internet causing mortal wounds to this rotting beast. UN IPCC AGW RIP (that's political and crony code for "we're f**ked!)

Financial Post article link:

http://network.nationalpost.com/np/blogs/fpcomment/archive/2009/11/23/cru-s-climate-tricks.aspx

[*RSJ: Thanks to John from Channel Isles for keeping this breaking story alive here on the* ***Journal****. I also received an email over night from Marc Morano relaying the confession and apology of George Monbiot, an activist-journalist, featured prominently in the so-called "debate" on The Great Global Warming Swindle produced by Australian Broadcasting Corporation, Tony Jones, activist-narrator. Here's Morano's link to Monbiot's apology and more:*

[http://blogs.news.com.au/heraldsun/andrewbolt/index.php/heraldsun/comments/even_monbiot_says_the_science_now_needs_reanalysing

[*Monbiot's apology is not sufficient. He needs to promise to drop any activism, to apply the ethics of journalism, and then resume writing at the entry level.*

[*Several times, I have complained here that IPCC's data series were just "too pat". For example,*

> [*Perhaps someday the data from those stations might be made reasonably available to the public (that is free, online, and compatible with desktop computers). Perhaps soon all the IPCC reference source material will be made available under the Freedom of Information Act. The public needs to put the IPCC on trial for what it has done, and the data could then be revealed as a part of discovery. Until then, the normal scientific virtue of skepticism, and scientific experience, call into doubt what the IPCC and Keeling portray in their graphs and the Consensus says in its reports about the nature of CO2 in the atmosphere.* ***Gavin Schmidt on the Acquittal of CO2, RSJ****, response Sunsettommy, 11/26/07*

[*And re NOAA CO2 data,*

> [*These records do not include any wind vector measurements or temperatures. They do show the results of quality control decisions, in particular tags indicating "rejected, diurnal variation (upslope)", but neither a basis nor data for making the decision. The label upslope seems to indicate a wind pattern observation.*
>
> [*A magnificent amount of work has gone into these records, but sometimes the results and conclusions seem too pat. Suspicions will be resolved only upon full, free, public disclosure, including the reference papers downloadable in text format. That should be done long before another dime is spent on CO2 abatement.* ***Acquittal of CO2, RSJ*** response to Derek, 8/8/08.

[*See also* ***On Why CO2 Is Known Not To Have Accumulated in the Atmosphere, RSJ****, response to John, 5/8/09;*

[*I had not suspected the temperature data, too, but the e-mails bring that into question. The tests I have done so far don't raise a flag, and the record for the last decade is contrary or for the last century contradict AGW anyway.*

[*Once the data got into climatologists hands, the abuses and fraud were obvious in IPCC Reports, as shown throughout this blog. Even if the data were correct, the papers here show AGW scientifically invalid.*

[*Steve McIntyre has shown that Michael Mann selected data and erroneously reduced them to prove his wishes for AGW. We now see that that double whammy of fraudulent science applies to IPCC for the reduction and allegedly CRU and GISS at least for temperature*

data manipulation.

[*IPCC Reports are the tip of the ice berg. But the ice berg isn't there.*

[*But AGW won't die. It is destined to survive as a tenet of the left, to join "deficits and debt don't matter: Keynes", "spending stimulates the economy: Keynes", "socialized medicine is good for the people: Health Canada", "hate liberally: Lenin", and "equality for the masses: Marx".*

[*Thanks again, John.*]

Posted by John, Channel Isles | November 24, 2009 5:32 AM

John, Channel Isles wrote:

0911241444

Dr G,

Rest assured I plan to keep 'Climategate' going. I not only wish to dance on the grave of the socialist politicians and their crony Gov't payroll 'scientists' (loose term, spivs would be entirely more apt) but I'm buying mining equipment to bury their fraudulent arses much deeper than 6 ft under!

I don't share the view AGW will be kept going any longer by the left. Thanks for the George Monbiot link and I suggest this demonstrates precisely why AGW is untenable hereafter. The AGW have taken the bait and come out with a huge strategic error. They should have ignored completely but no, the cretins have come out with spin, fob offs and now apologies.

Copenhagen was going to be nothing but waffle anyway, indeed it demonstrated with the lack of the lefts desired targets, that it will be an unmitigated failure.

And now they have Climategate to contend with. Just consider all the fallout about to come. Key climate con cronies will HAVE to resign. Key climate con methods will HAVE to be looked at and responded to. Scientists abused by their methodology now have high tensile ammo to counter-attack. It's going to be carnage and Climategate will drag on for at least a year. By the end of it the AGW crew will be in tatters.

Climategate has only just begun. Now adjust those temp charts back to reality and send them to the UN IPCC. When they stick that in their politicized reports it curtains Dr. G ;)))

[*RSJ: You may be right about AGW not having a life as it's own. The collapse at Copenhagen seems to be dragging down Cap & Trade in the U.S., but it remains part of Obama's radical belief system.*

[*If you want some white hot reactions from believers, try*

[http://www.realclimate.org/index.php/archives/2009/11/the-cru-hack/

[*which has maxed out at 1092 comments and spilled over onto*

[http://www.realclimate.org/index.php/archives/2009/11/the-cru-hack-context/comment-page-3/

[*See if you can relay anything of interest from the main body or the comments at realclimate.org. Comments there either get lost in the maze, now totaling over 1400 arriving on about a three minute interval, or at best elicit defensiveness and ad hominems from Gavin Schmidt and the other evangelicals.*]

Posted by John, Channel Isles | November 24, 2009 11:14 AM

John, Channel Isles wrote:

0911241456

I'll be sure to check some Climategate fall-out at Realclimate-only-we-faked-it !!! ;)))

But doesn't that judge prove what a colossal fall-out there is from Climategate? Don't measure the quality of the posts, measure the volume, it's unheard of. This scandal has legs of its own, the poor AGW crew can't contain it, and it'll be going on for months, poor sods will [be] worn out with all the accusations, counter-accusations and bullets through everything they believed in and held dear (peer review process, peer reviewed journals, the higher moral ground, etc., etc.)

[*RSJ: I've been exploring the purloined CRU e-mail, and here are some observations. First, here's a nice, searchable link to the whole set:*

[http://www.eastangliaemails.com/search.php

[*A big part of the volume of the e-mails is explained by it being a means for editing and reviewing IPCC reports, a huge undertaking.*

[*When McIntyre and McKitrick first exposed the hockey stick fraud, Michael Mann, lead creator, pleaded with the group,*

> [I need immediate help regarding recourse for free legal advice, etc. 6/24/05.

In response, U.S. senior scientist Tom Wigley, NCAR/CGD, an IPCC contributing author to both AR4 and TAR, suggested a defense for Mann:

> [The support for the hockey stick is not just the paleo reconstructions, but also the model results. If one takes the best estimates of past forcing off the shelf, then the model results show the hockey stick shape. No tuning or fudging here; this is a totally independent analysis, and critics of the paleo data, if they disbelieve these data, have to explain why models get the same result.

[*The paragraph has a little ambiguity with regard to the meaning of taking "best estimates of past forcing off the shelf". (It could mean to take it off the shelf and put it into the models, or the reverse, where the models are the shelf and already contain those best estimates to be removed.) Regardless, Wigley is suggesting how the models can be changed to reproduce the hockey stick. His "no tuning or fudging" means "no [further] tuning or fudging". In short, he is recommending manufacturing data to support Mann's results, which IPCC gullibly adopted for its TAR and wove into the AGW story. The hockey stick distorts data to show how humans have created a warming unprecedented in the last millennium.*

[*Wigley also relies on the mystique of models. If a computer model produced it, then whatever the meaning of it is, it must be true. Then he throws to the opposition the burden to untangle what he put in the models.*

[*One email credits Jerry Pournelle with this law and variations: "You can prove anything with secret data and algorithms". I would propose this variation: "One can demonstrate anything with models."*]

Judging from the blogs on the mainstream media the sceptics have having a field day, it's carnage out there. The greens who believe these frauds are even keeping their heads low. Sceptics out-number AGWs about 5 to 1, indeed the recent FT fob off it was 11-0 to skeptics, nobody even tried to defend this crap!

What is the IPCC going to do with these falsified figures/temp trends Dr G?

They've already had to 'remove quietly' Michael Mann's hockey stick chart once and a rebirth of it hammered down a second time. Now he's found hands in the cookie jar a 3rd time. What will their Report do/say now?

The IPCC is now honour bound to take out any falsified data, sweep over scientists like Treber caught out in this scandal, and put in real adjusted data. Adjust the data, adjust the Report. No recent warming, no shrill cry of 'wolf'. They've got a warmer Medieval Warm Period and a cooler industrial period. There's no drama for these drama Queens.

You know better than I how the adjusted picture from the adjusted fraudulent picture previously presented will look for the IPCC. They're firing on blanks now surely? And imagine ALL the adjustments they're going to have to make, each and every one a huge embarrassment, each a gulp of big humble pie as they have to admit to the world so many errors.

Credibility has also shifted right over to the skeptics. Their beloved 'club' of peer review and peer reviewed journals and the peer review process all trashed, all shown up for the boys club we thought it was. This is like Rome crumbling. They're toast.

[*RSJ: Enjoy the celebration, but there's way too much dancing in the streets. IPCC will do precisely nothing in response to these emails. It's Hadley that needs to replace some key people and recertify its published data. It needs to restore outliers and any other subjective data treatments. While many data records used by IPCC are suspicious and ultimately secret, I'm aware of none that has been shown corrupt even with the emails.*

[*On the other hand, IPCC has erred repeatedly and chronically in its data reduction and modeling. It needs to fix its errors reported in* ***Fatal Errors in IPCC's Global Climate Models****. It needs to apply Henry's Law and the Beer Lambert Law which govern the climate processes of dissolution and radiation absorption, and change its modeling paradigm to one that doesn't make nonlinear submodels additive. It needs to publish mass balance analyses. It needs to quantify correlations as functions of lag, and abandon point correlation coefficients and graphically generated visual correlations. It needs to stop its secret calibrations to make disparate records agree. It needs to validate its models on past records, and eliminate any discrepancies between its models and the past.*

[*The emails actually contain exculpatory information. They include a Q&A exchange about why Hadley and GISS temperature data differ. The answer turned principally on the fact that the US includes Arctic temperatures while Britain does not, and to a minor extent a difference between the base period for determining anomalies. At least those correspondents were ignorant of any global temperature data fudging, or extremely clever, anticipating exposure.*

[*The emails reveal that the climatologists were devoid of scientific skepticism. They actually believed their models and arrogantly that their journals were superior and objective. They have drunk their own bath water. On 3/11/03, Mann wrote:*

> [Thanks Phil,
>
> (Tom: Congrats again!)
>
> [The Soon & Baliunas paper couldn't have cleared a 'legitimate' peer review process anywhere. That leaves only one possibility--that the peer-review process at Climate Research has been hijacked by a few skeptics on the editorial board. And it isn't just De Frietas, unfortunately I think this group also includes a member of my own department...
>
> [The skeptics appear to have staged a 'coup' at "Climate Research" (it was a mediocre journal to begin with, but now its a

mediocre journal with a definite 'purpose'). Folks might want to check out the editors and review editors:

[http://www.int-res.com/journals/cr/crEditors.html

[In fact, Mike McCracken first pointed out this article to me, and he and I have discussed this a bit. I've cc'd Mike in on this as well, and I've included Peck too. I told Mike that I believed our only choice was to ignore this paper. They've already achieved what they wanted--the claim of a peer-reviewed paper. There is nothing we can do about that now, but the last thing we want to do is bring attention to this paper, which will be ignored by the community on the whole...

[It is pretty clear that these skeptics here have staged a bit of a coup, even in the presence of a number of reasonable folks on the editorial board (Whetton, Goodess, ...). My guess is that Von Storch is actually with them (frankly, he's an odd individual, and I'm not sure he isn't himself somewhat of a skeptic himself), and without Von Storch on their side, they would have a very forceful personality promoting their new vision.

[There have been several papers by Pat Michaels, as well as the Soon & Baliunas paper, that couldn't get published in a reputable journal.

[This was the danger of always criticising the skeptics for not publishing in the "peer-reviewed literature". Obviously, they found a solution to that--take over a journal! So what do we do about this? I think we have to stop considering "Climate Research" as a legitimate peer-reviewed journal. Perhaps we should encourage our colleagues in the climate research community to no longer submit to, or cite papers in, this journal. We would also need to consider what we tell or request of our more reasonable colleagues who currently sit on the editorial board...

[What do others think?

[mike

[*Here's what this eavesdropper thinks, mike. To the contrary of your position, other possibilities are obvious. One is that you are unaware of the role of skepticism in science, and assert your righteousness in leading the one true way. How does one get to be a climatologist without a sound foundation in the philosophy of science, in mathematics, or in ethical responsibility? These omissions led to your disgrace.*

[*Another view is that by offsetting* legitimate *and* peer-reviewed literature *in quotation marks, you cynically recognize that the captive journals have subverted peer review to the defense of your dogma.*]

Posted by John, Channel Isles | November 24, 2009 2:56 PM

John, Channel Isles wrote:

0911261131

The AGW crew are "devoid of scientific skepticism" indeed Dr. G.

I understand the Royal Society whose motto is 'nullus in verba' . ("take nobody's word for it") was changed in 2007 to mean "respect the facts".

[*RSJ: Latin-English translations always seem tough, being one to many. This must be especially so in this case because modern English has erased the difference between verbal and oral, except in sex.*]

This is mentioned in The Register news story pre-Climategate entitled "Treemometers: A new scientific scandal" involving the ever-determined Canadian mathematician, Steve McIntyre, of ClimateAudit fame. He chased down data from the Yamal project in Siberia which also involved CRU at the University East Anglia personnel.

[*RSJ: McIntyre and McKitrick, his partner once, also participated in AR4 by commenting substantially on the drafts. Many comments by them and others similarly critical of IPCC work were "Rejected" with cursory explanations, if any. This points to the fact that IPCC Assessment Reports are not peer reviewed, notwithstanding claims to the contrary. E.g., Mann to Tim Osborn, 10/5/99, Email 939141116.txt.*

[*You'll find ample criticisms of the peer review process throughout the* ***Journal****. Even the IPCC/CRU folks recognized the problem when they quoted the following from David Schnare, PhD, Senior Fellow, Energy and the Environment, Thomas Jefferson Institute for Public Policy:*

[The IPCC peer review process is fundamentally flawed **if** a lead author is able to both disregard and ignore criticisms of his own work, where that work is the critical core of the chapter. It not only destroys the credibility of the core assumptions and data, it destroys the credibility of the larger work - in this case, the IPCC summary report and the underlying technical reports. It also destroys the utility and credibility of the modeling efforts that use assumptions on the relationship of CO2 to temperature that are based on Briffa's work, which is, of course, the majority of such analyses. Bold added, Phil Jones to Tom Wigley, 10/3/02, attachment, Email 1254751382.txt.

[*Of course Schnare's hypothesis is exactly what IPCC does. For "if", read "because". The IPCC lead author, under no real threat or promise, decides what to answer and how. In real peer review, publication is withheld until the author makes necessary corrections, and*

conforms to prescribed practices and dogma. The IPCC review method is commendable, but it is, in the end, self-review, not peer review.

[*Mann is comical on the subject. Peer-review exists only where the reviewers agree with him and with the AGW model. Otherwise it is not "'legitimate'". Mann to Phil Jones, et al., 3/11/03, Email 1047388489.txt. He makes repeated references to articles posted on realclimate.org (RC), including especially this one:*

> [guys, I see that Science has already gone online w/ the new issue, so we put up the RC post. By now, you've probably read that nasty McIntyre thing. Apparently, he violated the embargo on his website (I don't go there personally, but so I'm informed).
>
> [Anyway, I wanted you guys to know that you're free to use RC in any way you think would be helpful. Gavin and I are going to be careful about what comments we screen through, and we'll be very careful to answer any questions that come up to any extent we can. On the other hand, you might want to visit the thread and post replies yourself. We can hold comments up in the queue and contact you about whether or not you think they should be screened through or not, and if so, any comments you'd like us to include.
>
> [You're also welcome to do a followup guest post, etc. think of RC as a resource that is at your disposal to combat any disinformation put forward by the McIntyres of the world. Just let us know. We'll use our best discretion to make sure the skeptics dont'get to use the RC comments as a megaphone...
>
> [mike

[*Mann, 2/9/06, Email 1139521913.txt to Tim Osborn, Keith Briffa. Note that Mann is quick to respond to Science, presumably the peer-reviewed journal, on his blog, realclimate.org. And RC is available for other believers to communicate scientific information. Not so for other blogs. They are unqualified in the AGW scheme of things. And note how realclimate.org is peer-reviewed: the editors promise to screen against opposing views. This might be chalked up to arrogance, but it's a methodology substituting for science.*

[*By contrast, no opinion on climate posted to the* ***Rocket Scientist's Journal*** *fails to be published, subject to expurgation and pointed ridicule where warranted, striving always for objectivity, and never ad hominem. It's a promise. Review here is on line, on going, and not limited to peers. It's what the Internet was designed to do.*

[*Note Mann's use of the word "skeptics". Phil Jones used the word "denier" (Jones to Mann, Schmidt, 8/13/09, Email 1250169233.txt) and Schmidt "denialist" (http://www.realclimate.org/index.php/archives/2006/09/sachs-wsj-challenge/). Schmidt & Mann, "contrarian". http://www.realclimate.org/index.php/archives/2008/11/not-the-ipcc-nipcc-report/comment-page-6/ . These players don't complete the distinctions: denier vs. believer, skeptic vs. layman/non-scientist.*

[*When Nature refused to publish a paper because its contents had already been revealed on realclimate.org, Phil Jones complained, "In essence it means the Real Climate is a publication", by which he means it is peer-reviewed. Jones to Folland, 1/7/09, Email 1231350711.txt. Is the barrier breaking down, Jones asks? An undertone here is that the journals are no longer custodians and warrantors of quality science, but merchants selling politically correct information.*

[*So the climatologists have a problem with the unwanted promotion of a blog to the status of a "publication", and they have the contrary problem of a "publication" in need of demotion for not toeing the line on the dogma:*

> [The Soon & Baliunas paper couldn't have cleared a 'legitimate' peer review process anywhere. That leaves only one possibility--that the peer-review process at Climate Research has been hijacked by a few skeptics on the editorial board. And it isn't just De Frietas, unfortunately I think this group also includes a member of my own department... The skeptics appear to have staged a 'coup' at "Climate Research" (it was a mediocre journal to begin with, but now its a mediocre journal with a definite 'purpose').
>
> [Folks might want to check out the editors and review editors:
>
> [http://www.int-res.com/journals/cr/crEditors.html
>
> [In fact, Mike McCracken first pointed out this article to me, and he and I have discussed this a bit. I've cc'd Mike in on this as well, and I've included Peck too. I told Mike that I believed our only choice was to ignore this paper. They've already achieved what they wanted--the claim of a peer-reviewed paper. There is nothing we can do about that now, but the last thing we want to do is bring attention to this paper, which will be ignored by the community on the whole...
>
> [It is pretty clear that thee skeptics here have staged a bit of a coup, even in the presence of a number of reasonable folks on the editorial board (Whetton, Goodess, ...). My guess is that Von Storch is actually with them (frankly, he's an odd individual, and I'm not sure he isn't himself somewhat of a skeptic himself), and without Von Storch on their side, they would have a very forceful personality promoting their new vision. There have been several papers by Pat Michaels, as well as the Soon & Baliunas paper, that couldn't get published in a reputable journal.
>
> [This was the danger of always criticising the skeptics for not publishing in the "peer-reviewed literature". Obviously, they found a solution to that--take over a journal!
>
> [So what do we do about this? I think we have to stop considering "Climate Research" as a legitimate peer-reviewed journal. Perhaps we should encourage our colleagues in the climate research community to no longer submit to, or cite papers in, this journal. We would also need to consider what we tell or request of our more reasonable colleagues who currently sit on the editorial board... [What do others think?

[mike

[*Mann to Phil Jones, et al., 3/11/03, above. A journal is not legitimate to Mann if it publishes something embarrassing to him. And he's not above castigating a fellow research for possible breaking with the faith – odd chap anyway, he – showing tell-tale signs of skepticism. He urges climatologists to isolate Climate Research by neither submitting there nor citing its articles. How about black listing in exxonsecrets.org? Does the name Joseph McCarthy come to mind?*]

He caught Michael Mann (again) cherry picking 12 of the available 34 'hottest samples' from tree rings to fabricate a cooler Medieval Warm Period. The beloved peer review process failed to pick up the selectivity of Mann's sampling technique.

[*RSJ: As I recall, McIntyre's data selection discovery was this year. Previously IPCC had no qualms about admitting to data selection:*

> [Mann and Jones (2003) [Global surface temperatures over the past two millennia. Geophys. Res. Lett., 30(15), 1820, for sale: $9] selected only eight normalised series (all screened for temperature sensitivity) to represent annual mean NH temperature change over the last 1.8 kyr. Four of these eight represent integrations of multiple proxy site records or reconstructions, including some O isotope records from ice cores and documentary information as well [as] tree ring records. AR4, ¶6.6.1.1 What Do Reconstructions Based on Palaeoclimatic Proxies Show? p. 471.

[*The view in RSJ had been that IPCC, once featuring the Hockey Stick as the needed proof of man's effect on climate in the TAR, subsequently in AR4 discarded it. Doubts once cast on the existence of the Medieval Warm Period, and with it the Little Ice Age, IPCC erased in a reluctant, understated rehabilitation. Curt Covey, research scientist at the Lawrence Livermore National Laboratory and both a lead author for the TAR and a contributing author for AR4, wrote the following:*

> [In this one respect (sea level rise) I agree with today's [Wall Street] Journal editorial that the science is not yet settled. Unfortunately, the editorial runs completely off the tracks … based apparently on one published data-set that contradicts all the others. It is not appropriate to cherry-pick data points this way. …
>
> [Re high-resolution paleodata, I never liked it that the 2001 IPCC report pictured Mann's without showing alternates. … It now seems clear from looking at all the different analyses (e.g. as summarized in last year's NRC review by North et al.) that Mann is an outlier though not egregiously so. Of course, like any good scientist Mann argues that his methods get you closer to the truth than anyone else. But the bottom line for me is simply that all the different studies find that the rate of warming over the last 50-100 years is unusually high compared with previous centuries.
>
> [Summarizing all this, the latest IPCC does back off a bit from the previous one. It says on Page 8 [AR4, Summary for Policymakers], "Some recent studies indicate greater variability [than Mann] in [pre-industrial] Northern Hemisphere temperatures than suggested in the TAR . . ." The wording is perhaps insufficiently apologetic, but I find it hard to object strenuously to it in light of the main point noted in the last paragraph. Covey to Christopher Monckton, Fred Singer, Jim Hansen, and Clifford Lee, 2/5/07, Email 1170724434.txt.

[*To which Mann responded with a vehemence, faster than his fingers could type, all in one invective ridden, run-on paragraph:*

> [Curt, I can't believe the nonsense you are spouting, and I furthermore cannot imagine why you would be so presumptuous as to entrain me into an exchange with these charlatans. What ib earth are you thinking? You're not even remotely correct in your reading of the report, first of all. The AR4 came to stronger conclusions that IPCC(2001) on the paleoclimate conclusions, finding that the recent warmth is likely anomalous in the last 1300 years, not just the last 1000 years. The AR4 SPM very much backed up the key findings of the TAR The Jones et al reconstruction which you refer to actually looks very much like ours, and the statement about more variability referred to the 3 reconstructions (Jones et al, Mann et al, Briffa et a) shown in the TAR, not just Mann et al. The statement also does not commit to whether or not those that show more variability are correct or not. Some of those that do (for example, Moberg et al and Esper et al) show no similarity to each other. I find it terribly irresponsible for you to be sending messages like this to Singer and Monckton. You are speaking from ignorance here, and you must further know how your statements are going to be used. You could have sought some feedback from others who would have told you that you are speaking out of your depth on this. By instead simply blurting all of this nonsense out in an email to these sorts charlatans you've done some irreversible damage. shame on you for such irresponsible behavior! Mike Mann

[*Not remotely correct? The Hockey Stick graph, TAR Figure 2.20, p. 134, attributed to Mann et al. (1999), is gone in AR4! In its place are a pair of spaghetti graphs by which an investigator might unscrupulously substitute visual effects for poor numerical correlation. The first is Figure 6.10(b),* Records of NH temperature variation during the last 1.3 kr.*, p. 467, containing three of Mann's and Jones' reductions buried in a nest of a dozen such graphs labeled by investigator. The spaghetti all comes together to feed neatly into the 13th graph, the instrumental record attributed to HadCRUT2v. The second is Box 6.4, Figure 1, p. 468, containing eight such graphs labeled by geographical region.*

[*The Mann et al. (1999) Hockey Stick is one of 13 graphs plotted on top of one another and thoroughly buried in Figure 6.10(b). Thus Mann is right, the Hockey Stick is still there, and, moreover, supported by a dozen other investigations. Proof by overlay. Just to reassure skeptics that no shenanigans were involved, IPCC wrote:*

> [It should be stressed that each of the reconstructions included in Figure 6.10b is shown scaled as it was originally published, despite the fact that some represent seasonal and others mean annual temperatures. AR4, ¶6.6.1.1 What Do Reconstructions Based on Palaeoclimatic Proxies Show?, p. 473.

[*IPCC is here implying that the tight clustering of the series is significant, and not a result of an overt intent to misrepresent at the time of preparing the chart. What is the meaning, then, of the caption to Figure 1 of Box 6.4?*

> [These records have not been calibrated here, but each has been smoothed with a 20-year filter and scaled to have zero mean and unit standard deviation over the period 1001 to 1980.

[*So how were the 6.10(b) curves calibrated originally? Matching the pastel color codes of those curves to the key provides the initials and date of authorship. Then indexing the code with the list in Table 6.1 two pages later provides the short form of the reference citation. Then after two more pages, IPCC provides an abbreviated indication of the calibration technique for all but four of the references.* Id. *Next is a capsule summary of the calibrations.*

[*Five (5) of the 12 series were calibrated by Mann, or calibrated to match one of his series. Three (3) were calibrated to look like the ensemble. Four (4) calibrations IPCC did not state. However, of those four, three had a mean value within 10% of the average of the five fashioned after the Mann series.*

[*Looking at the 12 series statistically, the two with the largest mean and the two with the smallest mean were indirectly or directly due to Mann. In terms of the standard deviation, one series with an unreported calibration was the largest by 6% of the largest Mann-type. The largest and smallest standard deviation of the other 11 were of the Mann species. In summary, every investigator but one calibrated his series to lie within the statistical bounds of Mann's results, and that exception was only slightly larger in standard deviation.*

[*Initial calibrations generally require mean shifting and standard deviation scaling, as IPCC made specific in its caption to Figure 1, Box 6.4. The result is that all the series lie on top of the Mann series with similar variability. The fact that the 12 plot on top of one another throughout most of the past 1.4 kyr history is a consequence of their original calibration, and not a validation of the Hockey Stick. It is a literal cover-up by IPCC, capitalizing on the conformity produced in peer reviewed climate literature.*

[*No information can be gathered from the overlap and scaling. A reasonable next step in data analysis might be to calculate the 66 autocorrelation and cross-correlation functions looking for patterns. However, IPCC reportedly subjected all the records to a 40 year low pass filter. This causes even uncorrelated records to appear correlated by the response characteristics of the filter.*

[*Two other features of this spaghetti graph of note are tight clusterings in the 10th and 20th centuries. The reasons for the first clustering, well into the Medieval Warm Period, is unknown. Only 8 of the 12 series span the MWP.*

[*Phil Jones suggested a possible cause for the coalescing around the instrument record into the 20th century, though, when he reported using "Mike's Nature trick of adding in the real temps to each series". Jones, 11/16/99, Email 942777075.txt to Ray Bradley, Mann, and M. Hughes. The effect is likely the cause of a peculiarity in pairwise cross plots of the 13 records, now including the instrument record. (Cross plotting removes the parameter of time between the records.)*

[*A striking feature of the cross-plots is the effect of the low pass filter. The data points wander slowly in a confined region, generally in the 3rd quadrant between about -0.5°C and -0.1°C in both coordinates. The plots are reminiscent of random Lissajou figures studied with oscilloscopes. However when plotted against the long Mann and Jones (2003) record on the abscissa, the data points from about year 1911 to 1912, begin a rapid (widely spaced) movement, coincident with the rapid climb in the instrument record, and leading to a small, end-game clustering near the origin. The trajectory is dominantly upward and to the right, at a slope of unity. If this 20th century phenomenon were a characteristic of just MJ2003 the data points, the movement would be horizontal to the right with a slope of zero. The fact that the trajectory has a slope of one shows the common effect, one shared by, and in synchronism with, the instrument record. By this test, most of the series appears to be contaminated with the "real temps".*

[*The series attributed to Briffa 2000, recalibrated in 2004, is exceptional, though not the Briffa et al., 2001 series. Briffa 2000 is pulled horizontally to the right in the 20th century where it remains incoherent. The Moberg et al., 2005, series is unique in that it distinctly reports the MWP and LIL events. Moberg is offset higher than the other series, causing it to wander in a higher cluster. However, the signature of contamination with the 20th century instrument data is still evident within its cluster.*

[*For most of a millennium, these calibrated and filtered series wander slowly and incoherently with respect to one another in a localized region. Then in 1911 or 1912, they suddenly become coherent in anticipation of the coming 20th century warming. This isn't science – its prescience.*

[*{Begin rev. 12/10/09} Because the dozen reductions do not agree with one another, they don't measure the same thing, much less temperature. The hypothesis of dendroclimatology is invalid. In his Wikipedia photograph, Prof. Mann is not holding thermometers:*

Professor Michael E. Mann, Wikipedia
Figure 24

http://en.wikipedia.org/wiki/File:Mann_treering.jpg {End rev. 12/10/09}]

[*The evidence is that IPCC intended to simultaneously retain the Hockey Stick by a cover-up, while it rehabilitated the MWP and LIL. The evidence also supports the observation that the dozen proxy series are cross-contaminated in the 20th century. IPCC, and by attribution the various Hockey Stick manufacturers, hope to establish that the 20th century warming is unprecedented in the last 1.4 kyrs, exceeding all natural variations, and hence must surely be due to man. Everyone knows that natural events missing in the last 1,400 years will never occur. At the same time, the embarrassment due to McIntyre's revelations about Mann's reconstruction necessitates abandoning the Hockey Stick, so IPCC obfuscates it with clutter.*

[*To have its cake and eat it too, IPCC provides a "schematic" ensemble average of the dozen series with shaded, progressive bands of uncertainty where error bars usually reside. This is AR4, Figure 6.10(c), p. 467. This schematic shows that the maximum temperature around year 1000 and lasting one or two decades could have exceeded the maximum thermometer reading at year 2000 by about 0.2ºC, with a subjective (schematic) probability of at most 10%. At the same time, IPCC shows that the proxy records for an instant in year 2000 could have risen to the same level with the same probability.*

[*The Moberg series contradicts the Hockey Stick. Someone in authority squeezed it down to make it conceal the contradiction. It needs to be reconstructed with no scaling to test IPCC's suspicious and convenient conclusion that the 20th century temperatures are unprecedented.*

[*A stain from the Hockey Stick is still present in AR4, but the original is hidden. IPCC still reports that the present instrument measurements are unprecedented, weakened by its statistical presentation, but compromised by its reliance on contaminated proxy records. Furthermore, the instrument record itself is under suspicion from allegations by McIntyre again, compounded by CRU's admission that it destroyed the original data in its custody. The bulldog ate its homework.*]

> This 'Yamal' project I've seen mentioned in the Climategate emails.
>
> http://www.theregister.co.uk/2009/09/29/yamal_scandal/

[*RSJ: The climate community is in turmoil. The news just won't stop, and it has yet to hit the mainstream media. McIntyre's climateaudit.org is overloaded, and he directs readers to his mirrored site. He announced that he is moving his blog to a new server and hopes to save all the comments from his other servers being retired. CRU has taken its main computer off line, and is using an emergency server which does not even have all the files that survived on its main server.*

[*Most importantly, McIntyre has struck again, revealing a portion of declining temperatures hidden by CRU from within the 20th century instrument record. See*

http://camirror.wordpress.com/2009/11/26/new-the-deleted-data/

[*He has posted two other articles while making changes to the first. His text promised a retrieval script which for awhile was missing. Still talking about "Hiding the Decline", a different approach is now shown three days later:*

http://camirror.wordpress.com/2009/11/29/still-hiding-the-decline/

[*McIntyre supplied a couple of links to tabulated temperature data, from which he likely constructed his revealing graph. One contains three records and the other has seven. He has not posted the data for his graph, a barely legible gif file, and I am still trying to reproduce his results from among those 10 records. Others have discovered and posted a fudge factor adjustment from Osborn-tree6/briffa_sep98_d.pro, and this may hold the key to McIntyre's construction because it ramps the temperature up between 1945 and 1970 to create a new, warmer baseline for 1970 to 1994. If this latest work holds up, which is "highly likely" in IPCC terminology, McIntyre will have scored a trifecta on CRU, IPCC, and the believers.*

[*By the way, the Osborn filter could have contributed to the contamination seen in Figure 6.10(b), and attributed to Mike's Nature trick.*

[*Reports in the last few days show CRU admitting to keeping manufactured data and destroying the originals. Climate Audit featured Phil Jones email of 11/16/99, mentioned briefly above, in which he explained with some ambiguity how he fudged some tree ring data with instrumental temperatures:*

> [I've just completed Mike's Nature trick of adding in the real temps to each series for the last 20 years (ie from 1981 onwards) amd from 1961 for Keith's to hide the decline. Mike's series got the annual land and marine values while the other two got April-Sept for NH land N of 20N. The latter two are real for 1999, while the estimate for 1999 for NH combined is +0.44C wrt 61-90. The Global estimate for 1999 with data through Oct is +0.35C cf. 0.57 for 1998. *Id.*

[*Two similar graphs along with another attributed to Jones et al. (1988) appeared on the cover of "WMO Statement on the Status of the Global Climate in 1999". This chart has neither instrumental data nor a record labeled "global". The Jones and Mann curves are classic Hockey Sticks, and they agree to perfection with the Briffa record in the blade.*

[*In "Michael Mann Responds to CRU Hack" (note the editorial choice that a hacker must be involved, as opposed to a whistle blower), an interview with DarkSyde (DS) on dailykos.com, Mann defended the data adjustment as a correction for the "'divergence problem'". This is the problem that the dendrochronological reduction followed the instrumental temperatures well until 1960, and then ran far too cool thereafter. IPCC explains this effect in ¶6.6.1.1* What Do Reconstructions Based on Palaeoclimatic Proxies Show?, id. Mann decided "'Hide' was therefore a poor word choice".

[*So faced with a multiproxy model for temperature, invalidated for its failure to predict the post-1960 warming period, Mann saw no problem with secretly fixing the data by arbitrarily changing the numbers to match what the investigator wanted the model to predict. He just objected to calling the method hiding. Maybe he'd like "fudging" or "dry-labbing".*

[*How the climatologists at CRU responded to McIntyre reveals the deceit in the AGW project. In phase I, McIntyre exposed how the hockey stick shape was an artifact of the data reduction technique employed by Mann et al. The climatologists rallied to defend their Hockey Stick. Google realclimate.org for McIntyre and "Hockey Stick". About half the 155 realclimate entries predate the Fourth Assessment Report. Mann's defense is especially interesting, claiming that his reduction was only one of "nearly a dozen model-based and proxy-based reconstructions". Mann,* Myth vs. Fact Regarding the "Hockey Stick"*, 12/4/04, http://www.realclimate.org/index.php/archives/2004/12/myths-vs-fact-regarding-the-hockey-stick/ . Of course, the models would have been tunable to produce pretty much whatever the investigator wants. Now revealed is that the data, too, were malleable. If a paleo reduction fails to show the current temperature "anomalous", meaning unprecedented, the crew follows Captain Piccard's command to "make it so".*

[*As to McIntyre and McKitrick, Mann declares their claims "false" and "spurious", after all, "McIntyre works in the mining industry, while McKitrick is an economist."* Myth vs. Fact, id. *Besides, Mike, they're Canadians, eh? As if climatological fraud or self-delusion didn't exist, or if it did, it is so sophisticated a field that only anointed climatologists might ever criticize. Climatologists condense their work in IPCC Assessment Reports, arrogantly written to instill not just government action, but blind government action.*

[*But Mann doesn't run IPCC or CRU. Phil Jones was the climatologist in charge of the temperature instrument records at CRU. In 2004, he explained,*

> [M&M [McIntyre and McKitrick] are completely wrong in virtually everything they say or do. Phil Jones email to Tom Wigley, 10/22/04, Email - 1098472400.txt.

[*And continuing,*

> [Bottom line - their is no way the MWP (whenever it was) was as warm globally as the last 20 years. There is also no way a whole decade in the LIA period was more than 1 deg C on a global basis cooler than the 1961-90 mean. This is all gut feeling, no science, but years of experience of dealing with global scales and varaibility. *Id.*

[*One of the advantages of peer-review is the spell checking. Note when Phil Jones refers to the Medieval Warming Period he says, "whenever it was", and agreeing that the LIA wasn't real. Thus he shows his dutiful accession to the latest revision of the AGW dogma, the Hockey Stick. It's not science – it's a gut feeling.]*

Lastly I did my head in reading all the links from your pointing me toward ClimateAudit and indeed Gavin Schmidt's Realclimate-only-we-faked-it website. Indeed I posted a comment complimenting Mr. Schmidt for his cool as a cucumber retorts to the many posts from skeptics and his consummate brush offs of implicating CRU emails. I asked if he didn't see a problem why had George Monbiot had called for the CRU's resignation and flogged himself publicly in guilt at promoting so much dodgy data over the past decade without a healthy dose of skepticism?

My post never appeared nor did Mr. Schmidt's response. Have I been peer reviewed by NASA?

[*RSJ: You've been screened. Mann, 3/11/03,* id.]

Posted by John, Channel Isles | November 26, 2009 11:31 AM

John, Channel Isles wrote:

0911281634

Al Gore admits he got it wrong. Yes the science isn't "settled" and of course the sceptics were right all along to be sceptical. Yes this 'game changer' of a Gore revelation in Newsweek this month proves the "debate" is not "over" though he didn't stretch to an apology for anyone.

Gore, acting without delay (or any scepticism) on amazingly new research from NASA only out this month, said CO2 was only responsible for 40% of recent warming (er, what warming?) and that it was soot and Methane that was responsible for 60% of the warming (um, what warming??).

[*RSJ: Your 40% figure is reported in your 11/4/09 prisonplanet.com citation, where the reader might infer he's talking about the relative importance of CO2 in the widely publicized and exaggerated greenhouse effect:*

> [Before we get too excited, Gore is not backing away from his support for the theory of man-made climate change, but his concession that carbon dioxide only accounted for 40% of warming according to new studies could seriously harm efforts to tax CO2, that evil, life-giving gas that humans exhale and plants absorb.
>
> ["Gore acknowledged to Newsweek that the findings could complicate efforts to build a political consensus around the need to limit carbon emissions," reports BB News.

[*The last quotation is from your 11/2/09 worldbbnews.com citation. In context, it suggests that CO2 plays a larger role through the albedo effect:*

> [In his conversations with [Gavin] Schmidt and other colleagues at the beginning of the year, Gore explored new studies – published only last week – that show methane and black carbon or soot had a far greater impact on global warming than previously thought. Carbon dioxide – while the focus of the politics of climate change – produces around 40% of the actual warming.
>
> [Gore acknowledged to Newsweek that the findings could complicate efforts to build a political consensus around the need to limit carbon emissions.

[*A reasonable inference is that the last sentence refers to a Gore interview just a few days earlier on 10/31/09 in Newsweek. It said ambiguously,*

> [only by the 1980s did CO2 from fossil fuels overtake that from deforestation, which accounts for 40 percent of the CO2 increase since the 1800s.

[*and*

> [Gore estimates that biochar could sequester 40 percent of annual CO2 emissions.

http://www.newsweek.com/id/220552/page/3

[*where biochar is charcoal from biomass. Did fossil fuels or deforestation account for the 40% increase? Or, does the 40% refer to the share of ACO2 emissions that might be sequestered in biochar?*

[*At the end of the trail so far, Gore seems to be referring to a previously unrecognized warming caused by soot deposits on snow and ice, which reduces Earth's albedo. If so, what is 40% of what? What was the value of snow and ice albedo previously used in the GCMs, and what is it now? Has it already been taken into account? In IPCC's previous calculations, what were the value of snow and ice albedo share of the total surface albedo, and the share of that surface albedo to the total planetary albedo, known as the Bond albedo? A UCLA climatologist reported that surface albedo is only 25% of the total, the remainder being from clouds. Once we get those numbers straightened out, then we can ask the question how long does the soot effect last before it is covered by new snow or washed away by rainfall, each of which increases with warming?*

[*At first blush, Gore's 40% figure might have been someone's inference from IPCC.*

> [Water vapour is also the most important gaseous source of infrared opacity in the atmosphere, accounting for about 60% of the natural greenhouse effect for clear skies (Kiehl and Trenberth, 1997 [*Earth's Annual Global Mean Energy Budget*]), and provides the largest positive feedback in model projections of climate change (Held and Soden, 2000). 4AR, ¶3.4.2 Water Vapour, p. 271.

[*IPCC didn't report the relative importance of the greenhouse gases in the Third Assessment Report. The 60% figure might have been misunderstood to have left 40% to CO2. In quoting the 60% figure, IPCC didn't bother with this fact from the same source:*

> [For the clear sky, water vapor contributes to 60% of the total radiative forcing, while carbon dioxide contributes 26% to the clear

sky radiative forcing.*Id.*, p. 206.

[*Wikipedia refines that estimate, using the same source (twice, plus Gavin Schmidt in realclimate.org),*

[When these gases are ranked by their contribution to the greenhouse effect, the most important are:

[• water vapor, which contributes 36–72%

[• carbon dioxide, which contributes 9–26%

[• methane, which contributes 4–9%

[• ozone, which contributes 3–7%

[It is not possible to state that a certain gas causes an exact percentage of the green house effect. This is because some of the gases absorb and emit radiation at the same frequencies as others, so that the total greenhouse effect is not simply the sum of the influence of each gas. The higher ends of the ranges quoted are for each gas alone; the lower ends account for overlaps with the other gases.

http://en.wikipedia.org/wiki/Greenhouse_gas

[*Of course, we're not interested in an exact or instantaneous percentage. What the AGW problem requires are global average parameter values, and since IPCC has determined that only ACO2 counts, we want the marginal effects of CO2 emissions. A possible inference from these reports is that if CO2 were the only greenhouse gas, the effect would be 26% of its present value. However, because the other greenhouse gases absorb some of the same spectral regions as CO2, removing all the CO2 would reduce the greenhouse effect by only 9%.*

[*This reduction in the greenhouse effect of CO2 is a saturation effect, which is treated incorrectly by IPCC. Repeatedly, IPCC reports that water vapor and CO2 radiative forcings follow a logarithmic curve. This implies that adding CO2 could eventually extinguish longwave radiation through the atmosphere. The logarithmic curve never saturates. Every doubling of gas concentration would cause the same increase in RF. Adding CO2 can do no more than make the atmosphere opaque to LWR in the CO2 bands. A window always remains. The effects can be seen in the Wikipedia diagrams in the article cited above.*

[*The physics of absorption is given by the Beer Lambert Law, not used by IPCC, and while the absorption can be approximated in some limited range by a logarithmic curve, that curve shifts in a larger range. This means that the logarithmic fit can be used for interpolation, but not extrapolation. It has no predictive power, but IPCC nonetheless uses the logarithmic relation as the cornerstone for its catastrophe prediction. Instead, radiation absorption follows the complement of a decaying exponential. Radiation absorption saturates, and the saturation effect is already well established.*

[*In short, the 40% number is quite meaningless. CO2 is only about 9% of the greenhouse effect, which is a fourth of what IPCC estimates (Lindzen and Chou) because it omits cloud cover feedback (**RSJ**). Fossil fuel burning certainly has a greater warming effect because of soot, but it is seasonal, has no cumulative effect, and if it blackened all the snow and ice, it would only affect about 25% of Earth's albedo. We can easily concede that fossil fuel burning has a positive effect on surface temperature through the combination of the greenhouse effect plus soot, but the effect is too small to be measured. However, the soot effect has a certain journalistic newness to it, a charm that helps crank up IPCC's global warming alarm.*

[*IPCC's omission of the CO2 relative effectiveness and its use of the logarithmic prediction are not accidents. They are typical. They are simplifications and they err in the direction of exaggerating CO2 effects.*]

Gore acknowledged to Newsweek the findings "could complicate" efforts to build a political consensus around the need to limit CO2. "Over the years I have been among those who focused most of all on CO2, and I think that's still justified," (well only 40% so!). "But a comprehensive plan to solve the climate crisis (what crisis?) has to widen the focus to encompass strategies for all of the greenhouse culprits identified in the NASA study.

The encompassing strategy to deal with soot should be interesting. Big Soot won't stand idly by and let Gore get away with it, of course. I say this as someone who is obviously in the pay of 'Big Soot'.

http://www.prisonplanet.com/al-gore-admits-co2-does-not-cause-majority-of-global-warming.html

As Andrew Bolt writes in the Australian Herald Sun, his flip-flopping "Suggests not only that Gore was wrong to claim the science was "settled", but that the hugely expensive schemes to "stop" warming by slashing CO2 emissions will be less than half as effective as claimed.

http://blogs.news.com.au/heraldsun/andrewbolt/index.php/heraldsun/comments/gore_clears_carbon_dioxide_of_most_blame/

And if the shifting sands of Gores scientific basis need constant adjusting - will he change again? Or is the science really "settled"? - then Gore has a belief system for Christians, Muslims and Jews with a training course for Hindus' coming soon as well. Well at least the belief system is settled if not the science! But hasn't that belief system been in place for the past 10 years already brushing aside all sceptics??

http://worldbbnews.com/2009/11/gores-spiritual-argument-on-climate/

Presumably the IPCC will now have to catch up and change all their reports which attributed it all to CO2? Bit of a bugger that! And

presumably the AGW believers, Greenpeace, Friends of the Earth and the EPA will all have to get back "on message" too?

Have you seen this new NASA revelation Dr G. The one that settles the science once and for all and throws 10 yrs of the IPCC's work out the window for getting it 60% wrong?

[*RSJ: If I'd seen this report, it wouldn't have registered. Believers are famous for saying, "It's in the Book". Every dogma needs such a tenet. Scriptures must be holy, and the gods infallible and honest. In that sense, in the believer's eyes, the science is indeed settled.*]

Posted by John, Channel Isles | November 28, 2009 4:34 PM

John, Channel Isles wrote:

0911290224

Sorry I thought the Al Gore soot and methane revelation was a new, November, news story. It appears here in the Guardian April '09.

http://www.guardian.co.uk/environment/2009/apr/28/black-carbon-emissions

> Quote: "Glaciologists working in Latin America, Nepal, China and Greenland all reported at the meeting in Tromso that glaciers were losing ice more rapidly and becoming less thick as a result of global warming.
>
> Dorthe Jensen, from the Niels Bohr Institute in Denmark, said: "In the last five years we have seen many ice streams double in speed. Their floating snouts have moved back 30 km. We never imagined the ice discharge would change so much." End Quote)

What has made this stream "double in speed" in the past 5 years? There's absolutely zero evidence soot particles are increasing or any industrial process is ramping up the emissions. A study showed how mists had declined significantly in Europe since the early industrial phase because our burning is so much cleaner today! Do soot particles speed up rivers too? Does soot double the pull of gravity, Isaac Newton should be told!

[*RSJ: The media treated the soot and methane revelation as if it were new. No apology needed. It's really hard to fact check everything we read.*

[*We are bombarded with reports like Gore's and Jensen's seemingly every day. It's the offensive strategy. My defense has been to segregate the AGW problem into its three components: (1) concede the warming, W, (2) insist on the global, G, and (3) contest the anthropogenic, A.*

[*Part A fails because the modeling is full of gaping holes. See **RSJ, IPCC's Fatal Errors**. That is true even if the data, part W, were perfect. Now, of course, with McIntyre's latest discoveries in mining CRU and Mann's database, the email exposure, and CRU's admissions, the temperature data are quite as suspect as the CO2 data were.*

[*Part G, the global part, is ignored with great regularity. AGW makes no claims on regional distributions around the surface of Earth or vertically through the layers of the ocean and of the atmosphere. So, let's concede claims like glaciers are shrinking in Nepal, the temperature lapse rate through the atmosphere has changed, or whatever one might hear about coral reefs or polar bears. Respond that AGW is about what man is doing to the global average surface temperature.*

[*Public interest in AGW is naturally highly skewed toward the data scandals and away from the equally fraudulent models. People readily believe anything that comes out of a computer. But even Tiger is incensed when someone shoots a seven and writes down a three. He wrote down a hole-in-one but shot a three. You may not mess with the data!*

[*With my strategy, the problem can be reduced to a manageable size and brought into focus. Namely, neither the fact of W nor its intensity establishes A. W did impose an urgency to act, to do **something**, but the data scandals should squelch that. Earth for billions of years has been alternately cooling or warming. There's no valid reason to assume that now it is caused, or even can be caused, by human activity.*

[*Remember to recycle.*]

Posted by John, Channel Isles | November 29, 2009 2:24 AM

John, Channel Isles wrote:

0911292059

Hi Dr G,

Looks like Climategate has got the sceptics foot in the door online but now a handful of mainstream newspapers if not British TV which still has its peddle to the metal of propaganda streaming leading up to Copenhagen. The blogsphere is certainly full of aggressive sceptics who appear very educated on the scientific points giving merry hell to the AGW-green crew even on leftie biased journals like the Guardian.

Here's a semi-organised basket of interesting stories I've found;

Dr. Jim Salinger, considered one of New Zealand's top scientists has been caught 'cooking the books' in exactly the same way as Mann et al. He began his NZ temperature graph in the 1980s when he was at the Climatic Research Unit at the University of East Anglia CRU.

http://www.energy.probeinternational.org/new-zealands-climategate

http://nzclimatescience.net/images/PDFs/global_warming_nz2.pdf

Nov 2008 - NASA GISS temperature data capers.

Steve McIntyre of Climate Audit emailed GISS informing them of a warming error. GISS issued a new set of data the next day, with Gavin Schmidt crediting Watts' blog with spotting the error (while studiously avoiding mentioning McIntyre). Article (see link) lists a string of warming adjustments and non-release of data (Schmidt and Hansen appear to run this place like a cowboy shop!)

http://www.theregister.co.uk/2008/11/19/nasa_giss_cockup_catalog/

Aug 2009 - Global warming Ate My Data

The University of East Anglia's Climate Research Unit, the world's source for global temperature records admitted it has "lost or destroyed" all the original data that would allow a third party to construct a global temperature record.

Professor Phil Jones, the activist-scientist who maintains the data set, has cited various reasons for refusing to release the raw data. Most famously, Jones told an Australian climate scientist in 2004: "Even if WMO agrees, I will still not pass on the data. We have 25 or so years invested in the work. Why should I make the data available to you, when your aim is to try and find something wrong with it".

http://www.theregister.co.uk/2009/08/13/cru_missing

Nov, 2009 - CRU hacked emails

Professor Phil Jones: "If they ever hear there is a Freedom of Information Act now in the UK, I think I'll delete the file rather than send to anyone" and "We also have a data protection act, which I will hide behind."

http://www.dailymail.co.uk/news/article-1230943/Climate-change-scandal-BBC-expert-sent-cover-emails-month-public.html#ixzz0YJ9mPvLT

"Climategate is the worst scientific scandal of our times" says Christopher Booker of the Telegraph. "Our hopelessly compromised scientific establishment cannot be allowed to get away with the Climategate whitewash... The second and most shocking revelation of the leaked documents is how they show the scientists trying to manipulate data through their tortuous computer programmes, always to point in only the one desired direction – to lower past temperatures and to "adjust" recent temperatures upwards, in order to convey the impression of an accelerated warming. This comes up so often (not least in the documents relating to computer data in the Harry Read Me file) that it becomes the most disturbing single element of the entire story."

http://www.telegraph.co.uk/comment/columnists/christopherbooker/

Ban Ki Moon, Sec Gen of the UN, and now Herman Van Rompu, the new (first) President of the EU, both want international Government funded on the back of CO2 taxation. Neither were elected by any voters and both ignore the majority of citizens don't believe in AGW. That's a whole lot of democracy going on!

Anyway back to Climategate I read somewhere in the dozens of articles (can't remember which, my brains fried again!) that it will open the floodgates to even more revelations and possibly whistleblowers. A BBC journo had the Climategate emails a month before it broke on a Russian server. Meanwhile another BBC journo says their total bias and pro-AGW policy borders on 'the religious'.

The cracks are appearing and cannot be stopped even with attempted media blackouts. They will get ever wider as some more stuff becomes public domain and then fear sets in with the AGW crew, we may see some more 'come clean' confessions, leaks and 'recently converted' to sceptics. We must see jailings for this global AGW anti-science scandal. It is fraud. Period.

[*RSJ: The October, 2008 GISS error was an accident, and a bit of a fiasco. By labeling all deniers of the truth faith as skeptics, the believers have managed to drive out whatever virtuous skepticism remained in their once scientific community -- during the LIL. GISS suffered from "too good not to be true".*

[*The New Zealand and M. James ("Jim") Salinger story is of a different magnitude. Salinger was a contributing author to IPCC's TAR and a reviewer for its AR4. A little forensic analysis on his data along with CRU's and GISS's might reveal a conspiracy to cook the books. Next time the folks down in New Zealand will know what CRU already knew: when you fix the data, destroy the originals. A bit of a cock-up, wot?*

[*Justice demands criminal proceedings.*]

Posted by John, Channel Isles | November 29, 2009 8:59 PM

John, Channel Isles wrote:

0912020710

The Daily Express runs today on its front page "THE BIG CLIMATE CHANGE FRAUD". It comes to something when one of the major middle class newspapers in Britain runs such an assertive story and such an aggressive headline.

Professor Ian Plimer condemned the climate change lobby as "climate comrades" keeping the "gravy train" going" and "load of hot air underpinned by fraud".

His comments came days after a scandal in climate-change research emerged through the leak of emails from the world-leading research unit at the University of East Anglia. They appeared to show that scientists had been massaging data to prove that global warming was taking place.

The Climate Research Unit also admitted getting rid of much of its raw climate data, which means other scientists cannot check the subsequent research. Last night the head of the CRU, Professor Phil Jones, said he would stand down while an independent review took place.

Front Page

http://www.dailyexpress.co.uk/ourpaper/view/2009-12-02

Article

http://www.dailyexpress.co.uk/posts/view/143573

[*RSJ: Sadly, much of American youth gets their news from Jon Stewart, a comedian who runs a mock news program called the Daily Show on American network TV. His comedy is pretty good, but it far exceeds his grasp on reality, tilting him way to the left. Even he has now seen fit to mock global warming and Al Gore. The tide that was supposed to be coming in seems to be going out.*

[*Our once responsible press, called the mainstream media as you probably know, has been terribly slow to pick up the story. FNC (Fox News Channel) has been carrying it, but Obama with the mainstream media pretty much in tow has a boycott in effect against appearing on FNC or repeating its news. It's much like Michael Mann calling for a dual edged boycott of Climate Research, the journal. This had to be the outcome from political correctness and socialism as they work their way against truth and the public interest.*]

Posted by John, Channel Isles | December 2, 2009 7:10 AM

John, Channel Isles wrote:

0912041004

Britain's Telegraph newspaper reports today there'll be an investigation into the Climategate scandal by the IPCC.

(Quote) Climategate: UN panel on climate change to investigate claims.

The United Nations panel on climate change is to investigate claims that scientists at the University of East Anglia's Climatic Research Unit manipulated global warming data.

Dr Rajendra Pachauri, chairman of the UN's Intergovernmental Panel of Climate Change (IPCC), told BBC Radio 4's The Report programme the claims were serious and he wanted them investigated. "We will certainly go into the whole lot and then we will take a position on it," he said.

"We certainly don't want to brush anything under the carpet. This is a serious issue and we will look into it in detail." (End Quote)

Yes I truly believe this scandal will be properly investigated by Dr Pachauri, the anti-consumer, anti-car, anti-meat and anti-Western wealth advocate. This guy doesn't wear his chips on his shoulders!!

http://www.telegraph.co.uk/earth/earthnews/6724249/Climategate-UN-panel-on-climate-change-to-investigate-claims.html

Nice article by the humorous and hard-bitten Brit Mark Steyn recently (a regular guest on FOX TV) entitled "CRU's Tree-Ring Circus. Who peer-reviews the peer-reviewers?"

http://article.nationalreview.com/print/?q=YjAxYzA3NmI0N2Y1MDVhYzdmM2JkZGIyMjE5ZWU2OTI=

[*RSJ: IQ is measured in standard deviations, so it lies along the positive real axis. This is hardly adequate in the cases of Pachauri and Ed Begley, Jr. In these two we have evidence that the IQ should be a complex number, sometimes negative, and sometimes possessing an imaginary component, as in the case of the possessed.*

[*The combined scores of the components should not all be additive. Reasoning ability should multiply the sum of the other components, and it should be bipolar, so to speak. So someone who reads a lot, has a good recall, and is reasonably good at ciphering, might have a large IQ in magnitude, but if he reasons like Begley, he would have a large negative number. Not unable to learn, but repulsing knowledge. Still, when I think of Ted Kaczynski, I think the IQ should be large but also dominantly imaginary. I'm puzzling whether a distinction can be made between Ed and Ted.*

[*As far as I can tell, Pachauri gets a small, negative number – articulate, but vulnerable to fads and dogma.*

[*Who gave IPCC the task to investigate CRU? Isn't this rather like peer review again? CRU must have its database purged and be re-staffed; IPCC should be burned to the ground. IPCC is thoroughly culpable in the fraud of AGW.*

[*Mark Steyn in good British fashion had some excellent puns that had never occurred to me, and some would never. We don't get much of anything over here that passes for wit. Warm-mongers, tree-ring circus made my day. Take a bite out of the dendrologists. Ecopalypse is good, though way too hard to say. But pier-review, indeed! Just the place to watch for the out-going tide to turn -- into Gore's inundation.*

[*Steyn's take on peer review is bang on target. Readers need to be reminded of what another Brit, Dr. Richard Horton, editor of UK's medical journal* The Lancet *had to say on the subject. It has appeared in* ***RSJ*** *a couple of times already, but to save readers from having to look it up, here it is again:*

> The mistake, of course, is to have thought that peer review was any more than a crude means of discovering the acceptability - not the validity - of a new finding. Editors and scientists alike insist on the pivotal importance of peer review. We portray peer review to the public as a quasi-sacred process that helps to make science our most objective truth teller. But we know that the system of peer review is biased, unjust, unaccountable, incomplete, easily fixed [*RSJ: jiggered, not repaired*], often insulting, usually ignorant, occasionally foolish, and frequently wrong.
>
> Richard Horton, MD, editor, The Lancet. http://en.wikipedia.org/wiki/Peer_review, citing from http://www.mja.com.au/public/issues/172_04_210200/horton/horton.html .

[*Mark Steyn would be a fine candidate for conductor of the budding orchestra of whistle blowers.*]

Posted by John, Channel Isles | December 4, 2009 10:04 AM

Joseph wrote:

0912161420

If you look at recent higher-quality data, and you detrend it (with a low-order polynomial), it's clear temperature fluctuations lag CO2 fluctuations by just about 10 years.

[*RSJ: Hmmm.*]

Posted by Joseph | December 16, 2009 2:20 PM

John, Channel Isles wrote:

0912170845

Joseph

If you de-fund the Gov't payroll crony scientists you'll find the temperature "detrends" all by itself.

And on that note Hello Dr G, it appears Mark Steyn is in much need to orchestrate the whistle blowers as they're coming out of the long grass at an ever increasing rate.

Britain's Daily Express newspaper is on its 3rd front page in the 2 weeks Cop-out-hagen has been on firing heavy canon into the sides of this lame, waffling rotten politicised global socialist beast. Today's front page headlines, "Climate Change Lies by Britain" and details the Russians questioning the data they sent to the UK Met Office Hadley Centre being cherry picked to show warming trends.

So hot off the Press 3 weeks ago with the East Anglia Climate Research Unit being caught fiddling and cherry picking data (who contribute to the UN IPCC's temperature records) we have the UK Met Hadley Centre accused of fiddling and cherry picking data (who contribute the UN IPCC's temperature projections with their GCMs) as well.

So the 2 main UK bodies who are major contributors to the UN IPCC are under question and also hiding the data too. These Gov't crony scientists are like turkeys slowly but surely being plucked naked and hopefully will be taken outside and strangled in time for Christmas. Then we'll have some peace on Earth from these waffling windbags and their ever more shrill clucking!

And to finish off the Daily Express' admirable crusade the story ends with a recent reader poll shows 98% believed they were being conned over global warming. That percentage is near scientifically acceptable standards as "the science is settled" and "the debate is over" isn't it Dr G?

Link. http://www.dailyexpress.co.uk/posts/view/146517

[*RSJ: Thanks for the input from over there. We in the U.S. see world affairs masked by the muck of what passes as journalism from the left. Did you see the article today about the "rousing cheers" for Hugo Chavez from the Copenhagen delegates?*

http://blogs.news.com.au/heraldsun/andrewbolt/index.php/heraldsun/comments/putting_our_economy_in_the_hands_of_chavez_fans

[Carried by the Drudge Report, we'll see if it penetrates US outlets. This says tons about both the media and the delegates at Copenhagen. There's nothing new in this. One of our most famous journalists, Walter Lippmann, and the American barn storming daredevil pilot Charles Lindbergh were quite enamored with Hitler, and not much deterred by the revelations during the War. The public deemed Lindbergh a national hero, and Lippmann an intellectual powerhouse. So much for the stuff of the public. FDR said Lippmann "has never let his mind travel west of the Hudson or north of Harlem", and of Lindy, "I'm absolutely convinced Lindbergh is a Nazi."

[*The problem of IPCC and AGW data is not limited to fudging the tree-rings and the temperature records. The CO2 record is far too pat, and accessible original data are unavailable, and apparently missing wind data. The IPCC has declared atmospheric CO2 to be well-mixed so it could then calibrate (read: fudge) data from other stations all to agree. And in another place, IPCC admits, far from being well-mixed, that it has a recognizable EW gradient and a NS gradient an order of magnitude stronger.*

[*What has been done by climatologists sets a new low to bring down the whole of science. The various academies and journals need to purge themselves and apologize, both publicly. The characters who have cast themselves as IPCC critics but AGW supporters, like gadflies Björn Lomborg and Roger ("incontrovertible") Pielke, need training in science so that they might one day show their contrition.*]

Posted by John, Channel Isles | December 17, 2009 8:45 AM

John, Channel Isles wrote:

0912180536

There's a chill wind that blows through Cop-out-hagen 15. On the day Obama has waffled aimlessly, pointlessly for barely a 10 minute speech Obama received the most muted round of applause in his term as President to date. What no standing ovation Comrades?

The weather, not the climate stupid, is -7 Min (average Mean for Dec -1) and -2 Max (average Mean +4 for Dec) today. That's -6 Degrees colder than the average for December;

http://www.worldweather.org/173/c00190.htm

Meanwhile the sceptics were lying in wait running bets on how many minutes it would take Al Gore from arriving to lie through his teeth. It took all of about 10 minutes for the global fraudster to drop a global porka;

http://www.youtube.com/watch?v=9551pt7QuFE&NR=1

Meanwhile the Danish Enviro minister resigned 2 days ago from Chairing Cop-out 15 after the 'Danish Paper' revealed the Industrial (rich!) countries weren't going to "transfer wealth" in quite as vast quantities as promised to crooks and freeloaders of Third World regimes. This sent the despots and tyrants to throw their toys out of the pram with over 100 walking out rattling their dummies.

Over 100 majors from the biggest cities of the world were shut out in the freezing cold for over an hour as Cop-out 15 security couldn't issue their Exec passes fast enough. Boy did they moan but they might like to try their own airports and the hell holes they've become for the travelling public with cuing for mind-numbing security.

That doesn't touch our global political elite who jetted in on over 140 private jets including ponce Prince Charles who hastily flew in on his Mum's Royal jet to deliver a speech we had 3 years to stop burning CO2! And Virgin boss Richard Branson was getting bankers and majors together to forge carbon trading scams (Goldman Sachs is behind the birth of this expensive paper chase, no less than 90% of European trading has been found fraudulent).

[*RSJ: Ponce, great word. Hasn't quite crossed the Atlantic: "an individual who attempts to fake having intelligence, class, or culture." Urbandictionary.com.*

[*Carbon credits are an analog of derivatives and credit swaps, none of them any more real than AGW and the greenhouse catastrophe. Ponce contracts. Fools' tools.*]

Branson without blinking will tell you he plans jollies to space for rich tourists on the biggest CO2 flumes ever devised in the private sector to date while mumbling on about his current fleet testing ecological fuels. Yeah right! And the UN's Tourist supremo said on CNBC yesterday world tourism would increase so it's important we "transfer the wealth" to poorer nations to help modernise their CO2 emissions (i.e., subsidise their competitiveness while nobbling ours).

[*RSJ: It's the capitalism of environmentalism. Socialism is incomplete until the last shred of freedom and the right to own anything is taken.*]

A Republican said on Fox News yesterday he didn't see the logic in America borrowing money to put into this $100 bn fund for Third World countries as the US Gov't would have to borrow it from somewhere (i.e., China) to hand out to developing nations (i.e., China).

[*RSJ: Is there a Republican out there who speaks but isn't riddled with bromides? "Putting a burden on our children and grandchildren". Inconceivable. We never pay off the debt, but debt servicing comes due immediately and can easily lead to bankruptcy before the first born arrives. "Printing money." All our money is printed. Bernanke is turning the dollar into play money, buying down interest rates to*

protect China and Obama from the devaluation of our Treasuries. We now have negative real interest rates -- again. The last time the Fed tried this trick in earnest it soon was forced to quit and dump its stash on the market. And so real inflation emerged, interest rates sky-rocketed, and with it the Carter administration collapsed, portfolios of S&Ls, banks, and everyone else fell like a house of cards, and a dynasty of Republican administrations was born. "Inflation is coming." Poop! Inflation is here, just not in the CPI (the liberal definition) because the velocity of money is in the doldrums. Our stock market this year is rising at 69% per annum, but not as fast as gold, 73% since March! The gold price of the Dow has been falling at about 16% since the middle of 2001, 24% since mid '07, 18% since the middle of '09. Pick your point. We continue to lose jobs in a rising market because stupid economists don't adjust for real inflation, and evil ones won't.]

So no Bush to blame, vilify and scapegoat for this global cop-out and clown show of waffling windbags at Cop-out-hagen 15 which will be remembered for being another disaster zone like Kyoto and indeed the European environment agreement earlier this year. AGW RIP

[*RSJ: Crazies dancing on a field of ignorance and imagination. Did you see the demonstrators in make-up and costume? The Four Horsemen of the Apocalypse? Inspired! Al Gore, the prophet. But no one to stand before the assembled synod to suggest their god might not exist. The US, the marketplace, producer, banker, and defender of the world, is in a self-induced, economic melt-down while international committees and dark forces meet to divvy up the spoils from defending against a phantom threat. Conventional wisdom and political correctness in both economics and science substitute for wisdom and truth. What a great script. Life imitates the movies.*]

Posted by John, Channel Isles | December 18, 2009 5:36 AM

John, Channel Isles wrote:

0912181416

Hi Dr G,

I think we've reached the infamous UN IPCC "tipping point". Is that climate science speak for when the hot air reaches a certain volume the opposing forces of the Universe (science, journalism and public opinion) comes crashing down to expunge the windbags?

The WWW is running boiling hot again after Al Gore was caught yet again lying through his teeth (it's just a habit he has!). The spectre of Climategate I (East Anglia CRU) and Climategate II (UK Met Office Hadley Centre) hanging over the socialist windbags at Cop-out-hagen 15 which is basking in -6 Degrees colder than average temperatures has been hotted up (i.e., the knives are well and truly out) on the web for Democrat and darling of the socialists, Nobel winner, Al Gore.

Gore claimed at Cop-15 the Arctic could "melt away in 5-7 years". But the scientist Gore quoted, Dr. Wieslaw Maslowski told the Times of London that he never said such a thing. Gore's office later admitted to the Times that the figures weren't actually all that "fresh," but were instead based on a conversation Gore had had with Maslowski several years ago!

Gore has also abruptly canceled a 16th Dec personal appearance according to the The Washington Times. The '$1,200 for a Gore handshake' event (green multi-millionaire Gore always protests he's just not in it for the money but any scientist that is sceptical must be backed by Big Oil) was to promote Gore's new book, "Our Choice". `The $1,209 VIP tickets granted the holder a photo opportunity with Gore and a "light snack." Do the "unforeseen changes" to Gore's schedule have something to do with ClimateGate and/or the fee being charged for his handshake?

The knives are out for Gore and so will the truth in this global white/green wash.

http://www.youtube.com/watch?v=X-5XwlcBqF0

http://business.rediff.com/report/2009/dec/15/al-gores-copenhagen-blunder.htm

http://newsbusters.org/blogs/noel-sheppard/2009/12/03/al-gore-cancels-1-200-handshake-event-copenhagen

http://network.nationalpost.com/np/blogs/fullcomment/archive/2009/12/15/al-gore-makes-a-hash-of-it-in-copenhagen.aspx

http://ironicsurrealism.blogivists.com/2009/12/03/al-gore-cancels-copenhagen-appearance/

Which is all a bit of a bugger for Barrack Obama who pressured by the scandals of Climategates I & II was forced to re-iterate "the science is REAL, this is not FICTION" in his desperately pointless aimless speech.

That followed the rotting carcass that is our British PM, Gordon Brown, throwing everything (£billions we haven't got) in a truly desperate plea to Third World despots to take our money and sign up to Cop-out 15 so he can get his global governance when his arse is booted out of office in 5 months. Brown, like Obama, has also felt the pressure to respond snidely to the Climategate scandals (like Obama not directly or in name) calling sceptics "flat Earthers". But not to worry, everybody has long since stopped listening to him on the economy he's bankrupted and pretty much everything else including science.

Posted by John, Channel Isles | December 18, 2009 2:16 PM

John, Channel Isles wrote:

0912201724

You mention the Fed's printing presses. My stockbroker advised last week we forget debts written off are money written off. With the huge amounts of consumer, business and indeed national defaults there are vast quantities of money electronically disappearing into thin air as well as the Fed and Bank of England electronically 'magicing' new money out of thin air.

The debt write-offs and disappearance of money is something that had never occurred to me (ever!) and equally never mentioned despite my 2 decades plus of reading large amounts of business literature!

<1 in every £4 in circulation in Sterling has been printed recently by Brown's cronies at the Bank of England. But in balance £1 of every £10 in credit card debt is likely to be wiped off never to be returned and there must be more sectors like this (biz debts, mortgages etc) that will be written off before this recession is through (circa 2013 if we're lucky!).

[*RSJ: Nor had I thought of the implications. I just took it as theft, unless, of course, the lender happened to be the government. When the government lends the money, the money stock is increased (inflated), but it's only temporary if the money is paid back (deflated). Otherwise, I don't see how debt write-offs have any more effect than a bank robbery might.*]

Posted by John, Channel Isles | December 20, 2009 5:24 PM

John, Channel Isles wrote:

0912230740

I've been catching up with the latest on Climateaudit. It's hard work to keep up for the layman at times but well worth it because at times it's absolutely devastating to the 'cowboys' of the self proclaimed, self preening 'Consensus'.

You've mentioned many times Dr. G inaccuracies and indeed the slight of hand not only the Gov't scientists but the IPCC itself. This article from Britain's Daily Mail newspaper illustrates literally the 'hide the decline' methodology.

Link. http://tiny.cc/HS2uF

Totally devastating to this Gov't crony science and the UN's IPCC is this article at Climate Audit entitled 'Some Thoughts on Disclosure and Due Diligence in Climate Science' actually dated 14 Feb 2005.

[*RSJ: Link here:*]

http://climateaudit.org/2005/02/14/some-thoughts-on-disclosure-and-due-diligence-in-climate-science/

Steve McIntyre, an ex IPCC author and previously at work in the mining industry, has a long experience of audit trails, disclosures and due diligence in the commercial world. What he found in the scientific world of the IPCC was a complete shambles. Some choice words from McIntyre which each on their own drives a horse and coaches through this pompous and frankly fraudulent claims by the IPCC, scientific community and Gov'ts worldwide.

> (QUOTE) "In a corporate world, there is simply no question about providing audit trails, and while they can take many different forms they all serve the purpose of ensuring the validity of information used for investment decisions ...

[*RSJ: Hughes Aircraft Company was plagued with government audits, sometimes as many as four a year in a single P&L center. The chief scientist wasn't subjet to audit, so I got the duty to conduct practice audits, from time to time drilling our leaders in every type of organization, including engineering, manufacturing, quality control, configuration management, reliability, finance, procurement, and logistics. We had to demonstrate compliance with government specifications and regulations, and with our own, properly documented company directives. This was a most educational, mind-numbing experience that often interfered with the regular, productive work of R&D.*]

> The 2001 IPCC report produced findings that have guided investment decisions, which vastly exceed the sums involved in even the largest financial scandals of recent years. Since the IPCC leaned heavily on a novel approach called a "multiproxy climate study" and in particular the "hockey stick graph" of Mann et al., this is where I've focused my attention."

[*RSJ: IPCC's reliance on the Hockey Stick was faux science on its face. IPCC tried to justify its conclusion that the present warming is manmade by showing that it is unprecedented in x years, where x has been stretched beyond its ability to sensibly estimate. This is neither logical (it is actually an example from the family of fallacies relating to multiple hypotheses) nor is it scientific.*

[*I once sat on a hung jury where one of the jurors insisted the accused was guilty of burglary because we couldn't answer his question, "Well, who else could have done it?" That person surely became an AGW believer, if not an IPCC climatologist.*

[*The climate problem interested me originally because the AGW model was missing validation, making it unethical for a scientist to promote it for public policy. The government places no such requirement on its employees. And on further investigation, IPCC proves to be a rat's nest and nothing short of criminal.*]

> An audit trail in this case is easily defined: the data in the form used by the authors and the computer scripts used to generate the results. In principle, these can be easily buttoned up and publicly archived. I think that most civilians would assume (as I did prior to starting my studies in this area) that such packages would be standard as part of a peer review process.

[*RSJ: Based on close work with several government laboratories, they appear to be held to no audits. Trying to transition government inventions in house for mass production proved too expensive to contemplate for the lack of backup, of specifications, of production planning, of configuration management, and of all the tasks required by government.*

[*One of the great failures of government development was the gloriously successful Hubble telescope. But routine engineering practices should have prevented it being put on orbit with an out-of-focus mirror. This is what comes of academic physicists trying to do engineering. I suspect that the same thing might have happened with the Large Hadron Collider.*

[*Government failures are routinely covered-up. I was warned by a highly placed government weenie not to use the phrase Hubble Trouble. Money seems to fix most anything. However, never demand that a government or academic laboratory make one on a schedule or two alike.*]

> In fact, this is not the case. None of the major multiproxy studies have anything remotely like complete due diligence packages and most have none at all." "..The author of one of the most quoted studies [Crowley and Lowery, 2000] told me that he had "mis-placed" his data.

[*RSJ: Some journals require the author to include his data with his submittal. Apparently these are not climate journals. By and large, a journal should have published standards to meet, and by which it might be audited or measured. A journal has a public trust, and it should be dedicated to the principles of science, and not to a particular dogma. Journals should solicit and feature controversial articles, those at odds with the accepted models, perhaps relaxing peer review to publish one a month for the community to practice its scientific criticism and skepticism. Some journals do perversely the opposite.*]

> In the case of the Mann et al [1998,1999] study, used for the IPCC's "hockey stick" graph, Mann was initially unable to remember where the data was located, then provided inaccurate data, then provided a new version of the data which was inconsistent with previously published material, etc." …

[*RSJ: Mann treats skepticism as a personal affront. His data and data reduction are his personal property, while his results should guide public policy because of his high position.*]

> In addition to the lack of due diligence packages, authors typically refuse to make their source code and data available for verification, even with a specific request. Even after inaccuracies in a major study had been proven, when we sought source code, the original journal (Nature) and the original funding agency (the U.S. National Science Foundation) refused to intervene. In the opinion of the latter, the code is Mann's personal commercial property. Mann recently told the Wall Street Journal that "Giving them the algorithm would be giving in to the intimidation tactics that these people employ". My first request for source code was a very simple request and could in no way be construed as "intimidation".
>
> However, the issue neatly illustrates the disconnect.
>
> IPCC proponents place great emphasis on the merit of articles that have been "peer reviewed" by a journal. However, as a form of due diligence, journal peer review in the multiproxy climate field is remarkably cursory, as compared with the due diligence of business processes. Peer review for climate publications, even by eminent journals like Nature or Science, is typically a quick unpaid read by two (or sometimes three) knowledgeable persons, usually close colleagues of the author.

[*RSJ: This chronic failure of the journals shows that the peer-review process is a shameful shambles. A text book example is the contemporary story of Jan Hendrik Schön. If you're not familiar with it, Wikipedia has a decent, brief article here.*]

http://en.wikipedia.org/wiki/Jan_Hendrik_Schön

> It is unheard of for a peer reviewer to actually check the data and calculations. In 2004, I was asked by a journal (Climatic Change) to peer review an article. I asked to see the source code and supporting calculations. The editor said that no one had ever asked for such things in 28 years of his editing the journal. He refused to ask for source code; the author refused to provide supporting calculations. Out of my involvement, the journal ended up with a new data policy, which was all to the good. But there is nothing at the journal peer review stage in climate publications which is remotely like an audit.
>
> It's my view that this is all the more reason why source code and data should be archived. There is a great deal of public misconception of the forms of due diligence actually carried out by the IPCC. Although the IPCC and similar agencies have many meetings and committees (usually in nice places), they do not carry out any audit or verification activities. While this has long been known by insiders, it was recently admitted in written answers, see especially questions 30-40, by Michael Mann to the US Senate in fall 2003.
>
> > 30. Did IPCC carry out any independent programs to verify the calculations that you made in MBH98 or MBH99? If so, please provide copies of the reports resulting from such studies. It is distinctly against the mission of the IPCC to "carry out independent programs", so the premise of the question is false.

[*RSJ: IPCC claims that its review process is peer-review. It is not. It is incestuous self-review. It does a decent enough job of soliciting and temporarily revealing the comments, but in the end the reviewer has no power to demand repair or justification by withholding publication, and the reviewer can bring no fresh perspective on the tenets of science. As a result, the IPCC review process is a sham.*]

> Thus, if a paper has passed the cursory journal peer review process, there were no subsequent audit or verification steps prior to adoption by the IPCC. Ross McKitrick and I have demonstrated that there were serious calculation errors in the most famous IPCC graph–the 1000 year climate hockey stick. In this case, the methodology had been incorrectly described in the journal

> publication. I also found that there had been an influential but unreported alteration to a key data series, where the alteration had been disguised by a (perhaps unintentional) misrepresentation of the start date of the underlying data. We published these findings recently in Geophysical Research Letters and Energy & Environment. But the math involved is not particularly sophisticated: the errors would have been discovered long ago had there been even routine checking.

[*RSJ: Furthermore, noncommercial science is a public endeavor. Articles available only for a fee are not a legitimate part of science. Every reference made by IPCC in its reports and all data used should be free, on-line in a fully searchable, text and data format. The IPCC itself should be made to comply with the Freedom Of Information Act.*

> It still amazes me that for all the billions of dollars being spent on the climate change industry (which I suspect dwarfs the mineral exploration industry in dollar volume … . But my impression and what I'm trying to convey is that it's not a small industry, and the thousands of people working full time on this issue just in Canada, it was nobody's job to check if the IPCC's main piece of evidence was right. The inattentiveness of IPCC to verification is exacerbated by the lack of independence between authors with strong vested interests in previously published intellectual positions and IPCC section authors.
>
> For example, Michael Mann had published an academic article announcing that the 1990s were the warmest decade in human history. He then became IPCC section author for the critical section surveying climate history of the last millennium, adopting the very graph used in his own paper on behalf of IPCC. For someone used to processes where prospectuses require qualifying reports from independent geologists, the lack of independence is simply breathtaking and a recipe for problems, regardless of the reasons initially prompting this strange arrangement. It seems to me that prospectus-like disclosure must become the standard in climate science, certainly for documents like IPCC reports (which are like scientific prospectuses), but even for journals. The American Economic Review last year adopted such a rule; I hope they enforce it.

[*RSJ: Mann held no such position on the Fourth Assessment Report, and the new team perpetrated a literal cover-up of his earlier work. They rehabilitated the Medieval Warm Period and the Little Ice Age, but retained Mann's data reduction hidden among a dozen other such reductions, dutifully scaled and skewed to obliterate Mann's results in one hairy graph. But then IPCC routinely relies on validation by graphical sophistry for many of its key points.*]

> In business, "full, true and plain disclosure" is a control on stock promoters. While it may not always be successful, it gives an enforcement mechanism. There is no such standard in climate science. In the Mann study there are important examples of pertinent adverse results, known to the authors, which were not reported. In fairness, the journals do not require authors to warrant full, true and plain disclosure and there is little guidance to such authors as to what is required reporting and what is not required.
>
> I've found that scientists strongly resent any attempt to verify their results. One of the typical reactions is: don't check our studies, do your own study. I don't think that businesses like being checked either, but one of the preconditions of being allowed to operate is that they are checked. Many of the most highly paid professionals in our society–securities lawyers, auditors–earn much of their income simply by verifying other people's results. Businesses developed checks and balances because other peoples' money was involved, not because businessmen are more virtuous than academics.
>
> Back when paleoclimate research had little implication outside academic seminar rooms, the lack of any adequate control procedures probably didn't matter much. However, now that huge public policy decisions are based, at least in part, on such studies, sophisticated procedural controls need to be developed and imposed. Climate scientists cannot expect to be the beneficiaries of public money and to influence public policy without also accepting the responsibility of providing much more adequate disclosure and due diligence. (END QUOTE)

Sorry to reproduce almost in its entirety but McIntyre's 'simple' mechanical application of basic audit rules simply blows the IPCC and this entire road show off the road. Ignoring the quality of the science, the quality of the IPCC's methodology is so incredibly sloppy and amateurish as to not warrant any further consideration for policy until they put their shambolic house in order.

Dr. Pachuari, Chairman of the IPCC, insists the Climategate scandals will be "taken seriously ... and investigated seriously". How can anyone sit on top of this ruleless unaudited clown show for years and now pretend he will do anything thoroughly or seriously?

> Link. http://tiny.cc/jlJyA

[*RSJ: Secrecy and abuse of data and data reduction are only part of the story, the part that would be uncovered in an audit. A more obvious part because its in the open in its reports is that IPCC has tortured the physics and science.*]

Posted by John, Channel Isles | December 23, 2009 7:40 AM

Jerry Borglum wrote:

0912251252

> Some of the links on your site seem invalid. I hope you fix them :)

[*RSJ: Apologies. It happens with some regularity. I'll fix what can be fixed if you'd kindly be specific.*]

Posted by Jerry Borglum | December 25, 2009 12:52 PM

John, Channel Isles wrote:

1001071629

Hi Dr G,

You wrote the "..IPCC has tortured the physics and science.." and "the IPCC review process is a sham" and "..IPCC proves to be a rat's nest and nothing short of criminal." All 3 comments struck a serious chord and made me laugh in equal measure ;))

We've been discussing the un-audited, slop bucket, junk science of the UN's IPCC, the peer review process and science journals. I'm stuck in Hungary as many flights into the UK have been cancelled due to a big cold snap (Britain falls apart at precisely 0 Degrees Celsius, Europe still runs at -15 for the record!). CNN News is showing similar uber-cold spells in America and indeed China and Seoul at -15 Degrees, their coldest winter in 40 years.

[*RSJ: From time to time, I had defended climatologists against the charge that the past decade of cooling invalidates AGW. My basis was the often repeated claim that climate is global average weather over at least 30 years. I have just recently discovered IPCC's long standing definition that relaxes the time period substantially:*

> [**Climate** Climate in a narrow sense is usually defined as the average weather, or more rigorously, as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from **MONTHS** to thousands or millions of years. The classical period for averaging these variables is 30 years, as defined by the World Meteorological Organization. The relevant quantities are most often surface variables such as temperature, precipitation and wind. Climate in a wider sense is the state, including a statistical description, of the *climate system*. In various chapters in this report different averaging periods, such as a period of 20 years, are also used. Bold caps added, AR4, Glossary, p. 942.

[So the event of the past decade invalidates AGW by more than an order of magnitude: global CO2 went up and global average T went down.]

All so soon after discussing global warming at Cop-out-hagen!

An oft-quoted British Gov't study, The Stern Review, by hired crony Sir Nicholas Stern, calculated the price per Ton of Carbon. Bjorn Lomborg reviewed Lord Stern's 'piece of work' and concluded Lord Stern never showed or did any of his calculations!

China has banned citizens burning briquettes of coal and now their citizens are freezing on puny little electric fires with the Peoples Gov't now rationing electricity due to the surge in demand during the cold spell. As per the PR job for the Beijing Olympics the Gov'ts reason for banning coal burning is "smog".

I don't mind smog. I can't see anything against smog in fact. It's a natural part of any countries climb out of poverty toward industrialization and into the 1st World. But smog has been made unfashionable and not 'PC' by the shrill empties of environmentalism. For the sake of enviro political correctness Chinese citizens are freezing. Bring back burning briquettes of coal and smog I say.

[*RSJ: Re smog, I have to give environmentalism an A. The smog in Los Angeles was quite intolerable, and it has been substantially fixed. The unfortunate part is that the Air Pollution Control District doesn't know when to declare a victory, and turn off the heavy-handed, unfettered, anti-capitalist restrictions that can do no more for smog but a lot for socialism. It bears a large responsibility for the decline in the California economy from near the top among nations to competing for last among the States, and sinking into bankruptcy.*]

This brings me back to crony-itus and Gov't payroll consultants like Lord Stern. He calculated the 'costs' of warming but nowhere did he calculate the (colossal) benefits +2 Degrees warming would bring.

Stern stirred up hysteria calculating millions of people being displaced by rising sea levels but gave man, that smartest of all animals by a country mile, less intelligence than a beach crab on being able to handle a rising tide! We have dealt with sea level change for thousands of years (the Romans sea landing fleet - invasion point - in Britain 2,000 yrs ago was found recently 3 miles inland 6 ft under the top soil).

We know plants grow faster in higher temperatures (and greener with higher CO2) and we know heat holds no worries for man. Cold is the enemy of our ecological system, life and man. Cold snaps kill more people, animals and plants by orders of magnitude than warm spells. The Stern Review calculated none of the benefits whatsoever on its skewed/corrupt way to pricing Carbon.

[*RSJ: When Mann and others tried to use the faster growth in warmer temperatures as the basis for a temperature proxy, the method failed. We know it failed not because we know the actual temperatures in the past period, but because no two of the dozen or so studies agreed. Dendroclimatology is invalid.*]

Posted by John, Channel Isles | January 7, 2010 4:29 PM

John, Channel Isles wrote:

1001091131

You write "Dendroclimatology is invalid". And so too is Lord Stern's pricing of Carbon. If it is a greenhouse gas, limited and weak at

best, it is at most a variable. You cannot fix a price on a variable component that depends on so many other variable components.

The Stern Review is garbage.

[*RSJ: Thanks for the tip, again. We need to pay attention to Lord Stern, but I had not. So I read his bio, downloaded the Stern Review, listened to him speak on YouTube, and researched his recent statements in the media. Key among them was this little piece of ridicule and blank ad hominem out of the handbook for the AGW Movement:*

> [Those who say that climate change doesn't exist are being understood as the flat-earthers that they are, as the people who deny the link between smoking and cancer, as the people who denied the link between HIV and AIDS. They are marginal and they are ridiculous. And they are very confused.
>
> [http://www.guardian.co.uk/environment/2009/mar/10/nicholas-stern-accuses-climate-change-deniers

[*I found Stern's blog, and submitted a comment relating to a narrow scientific issue, a comment posted during this writing. Here's what I wrote:*

> [*Dear Lord Stern,*
>
> [*In the Stern Review, you say with regard to the Hockey Stick controversy,*
>
> > [Much discussion has focused on whether the current trend in rising global temperatures is unprecedented or within the range expected from natural variations. … [¶] Climate change arguments do not rest on "proving" that the warming trend is unprecedented over the past Millennium. … However, they [the National Research Council] state that in some regions the warming is unambiguously shown to be unprecedented over the past millennium. Stern Review, Part I, Box 1.1, p. 6.
>
> [*Ignoring that science is never about "proving" matters anyway, you argue that being unprecedented is not determinative. Good. But then you conclude after some discussion and by (peer- reviewed?) authority that the unprecedented warming is unambiguously true. This argument is inconsistent.*
>
> [*Further, you rely on the present levels of GHGs being unprecedented:*
>
> > [Current levels of greenhouse gases are higher now than at any time in at least the past 650,000 years. Fn 5
> >
> > [Fn 5: Siegenthaler et al. (2005) using data from ice cores. The same research groups recently presented analyses at the 2006 conference of the European Geosciences Union, which suggest that carbon dioxide levels are unprecedented for 800,000 years. Stern Review, Part I, ¶1.2, p. 2
>
> [*Assuming your facts were true for the moment, you seem to adopt the argument that because the modern warming and modern CO2 concentrations, in particular, are unprecedented that CO2 is known to be the cause of warming. This is the common error of using correlation in place of modeling cause. In fact before any human influence, the warming dominantly preceded the CO2. Therefore CO2 could not have been the cause, and further the shape of the CO2 increase followed Henry's Law showing that it dominantly came from surface waters. This result validates the model that warming adds CO2 by the mechanism of outgassing, and no reason exists that that process is not on-going in the modern era. Henry's Law demands it be so.*
>
> [*Now to the facts: Your statement cited from ¶1.2 is common in the IPCC and peer reviewed literature, but is false without a major qualification. It would be correct to say,*
>
> > [*Current levels of greenhouse gases AVERAGED OVER A FEW MINUTES are higher now than at any time in at least the past 650,000 years AVERAGED OVER MANY DECADES.*
>
> [*Mathematics demands it be so. As you have elsewhere noted, this interval refers to ice core records, and the 650,000 figure comes from the Vostok data set. Ice core analysis releases gas from firn ice, and firn ice requires perhaps as little as 40 years, and more likely 70, to several thousand years to close. This means that the ice core method, actually like all detection and measurement processes, is a low pass filter. All such processes measure the average over the aperture, in both time and space. Ice core data reduction is no exception, and is extraordinarily slow. This applies not only to the greenhouse gases, CO2 in particular, but also to temperature determined from the non-greenhouse gases, deuterium or oxygen isotopes. The gases collected are the total during the time that the aperture is open. When comparing with past methods, modern instruments may be considered instantaneous. Ice core data greatly reduces the true variability by what is known as a variance reduction ratio. They produce extremely long term averages.*
>
> [*Furthermore, Vostok sampling, for example, has an interval of about 1,400 years. If the firn ice closes in 40 years, the probability of including an event like the modern record from Mauna Loa is about 3%. No amount of signal processing can fix this problem. What can be said about the past records of temperature and GHGs is that the answer lies somewhere between (1) a 97% confidence that it would have been missed altogether for short firn closure times, and (2) the magnitude of the ancient gases is reduced to, say, about 3% of the average modern level for long closure times, that is, on the order of a few millennia or less. In summary, the Vostok record would have missed a short event like the MLO 50-year rise in CO2, or the temperature rise since the Little Ice Age, because it skipped the event altogether or because the event was lost in the long time required for the firn to close.*
>
> [*The statements that the modern record is unprecedented for either temperature or CO2 are invalid. The conclusion that CO2 is the cause cannot be validated based on these considerations, and in fact is invalid in a climate model that would include the following effects that IPCC and the peer-reviewed climatologists err to omit: (1) the on-going natural warming processes, (2) the*

outgassing of GHGs under Henry's Law, (3) the saturation effect of GHG absorption under the Beer-Lambert Law, and (4) the powerful negative cloud albedo feedback that stabilizes Earth's climate in the warm state.

[*The flat-Earther is myopic -- his horizon is fore-shortened. He doesn't see that the ships in the distance go down by the waterline. We each need to see that the proxy records, whether from tree rings or ice cores, are down by the waterline. Anthropogenic Global Warming is analogous to the flat Earth. It is the flat Earth climate.*

[*Adding no insight, Stern parrots what IPCC has written. Here's how I score his adoption of IPCC tenets underlying AGW model and its promotion.*

MODELING PRINCIPLES OF AGW

1	☑	Peer review is a bulwark for acceptable scientific models.
2	☑	Science rules by consensus.
3	☑	Climate science is done.
4	☑	Ad hominem, ridicule, and misdirection are valid scientific method.
5	☑	Events unprecedented in the record must have a novel cause.
6	☐	Natural forcings were in equilibrium at the industrial revolution.
7	☐	The response of a nonlinear model is the sum of the separate responses of its parts.
8	☑	Warming coincident with the modern era reveals a linkage.
9	☐	Ocean surface layer is in equilibrium.
10	☐	CO2 is a long lived GHG, hence well-mixed.
11	☐	Radiation absorption follows the logarithm of gas concentration.
12	☑	Dire predictions of AGW trump any need for validation.
13	☐	Albedo is not temperature dependent.
14	☑	Touch up data and charts to produce desired results.

[*In for a penny, Lord Stern might as well go in for the pound and endorse IPCC's other tenets. But he repeats just enough science to establish his bona fides, and to get on with #12, his portal to his economics. His Review is deluged with floods, devastation, famine, and catastrophe, all caused by anthropogenic global warming. That, his model says, is going to cause a decline in GDP, with poor nations suffering twice the loss of the rich ones. A GDP loss increases worldwide poverty creating an ethical travesty in his brand of economics.*

[With such possibilities on the horizon, it was clear that the modelling framework used by this Review had to be built around the economics of risk. Averaging across possibilities conceals risks. The risks of outcomes much worse than expected are very real and they could be catastrophic. Policy on climate change is in large measure about reducing these risks. They cannot be fully eliminated, but they can be substantially reduced. Such a modelling framework has to take into account ethical judgements on the distribution of income and on how to treat future generations. Stern Review, Executive Summary, p. ix.

[The stripped-down approach that we shall adopt when we attempt to assess the potential costs of climate change uses the standard framework of welfare economics. The objective of policy is taken to be the maximisation of the sum across individuals of social utilities of consumption. Stern Review, Box 2.1, p. 30.

[The social welfare function's treatment of income differences can be calibrated by simple thought experiments. For example, suppose the decision-maker is considering two possible policy outcomes. In the second outcome, a poor person receives an income $X more than in the first, but a rich person receives $Y less; how much bigger than X would Y have to be for the decision-maker to decide that the second outcome is worse than the first? Stern Review, Box 2.1, p. 30.

[*"Ethical judgements on [redistributionalism]"? Stern says,*

[Chapter 17 argues that changing attitudes is indeed likely to be a crucial part of a policy package. But it raises ethical difficulties: who has the right or authority to attempt to change preferences or attitudes? Stern Review, ¶2.7, p. 37.

[*As if the public had a say! The ethical question for Stern is who has the right to impose any policy, and especially one not supported by an informed public?*

[*Stern's "social welfare function" encompasses a two-state economic model, project or no project. (Note that it neglects the consumption of the socialism managers.)*

Stern's Outcomes

Person	I	II
Poor	C	C+X
Rich	nC	nC-Y

[*Stern's outcome under his project is the Socialist ideal. It ignores Socialist reality, and as it does the socialist alternative, Capitalism. Here is a chart covering the more complete set of economic alternatives:*

Stern's Outcomes in Larger Context

	I	II	III	IV
Person	**Hybrid Baseline**	**Socialism Ideal: Redistribution**	**Socialism Reality**	**Capitalism**
Poor	C	C+X	C–X	C+X
Rich	nC	nC-Y	nC–Y	nC+Y

[*By limiting the alternative outcomes in his model, Stern reveals his redistributionalist motive and his econometric bias. He will take from the rich and give to the poor, and it will have no macroeconomic consequences. To be fair, in a couple of other passages he may distinguish between ethics and redistribution. For example,*

> [Modelling over many decades, regions and possible outcomes demands that we make distributional and ethical judgements systematically and explicitly. Stern Review, Part II, ¶6, p. 143.

[*But "stripped down", as Stern says, beneath the camouflage, lies his message: redistributionalism, accomplished in the name of a defense against the AGW boogeyman.*

[*When put in practice, socialism endlessly needs to mend inequities among its constituents, and raise taxes on the others as the failing, uneconomical system exhausts its inheritance. Socialism consumes the wealth that freedom created. These inevitables cause every socialist economy to circle the drain, down toward its only stable state in which every citizen but the ruling class has no income: uniformité, égalité, pauvreté. Under capitalism, the rich, encompassing the entrepreneurial, increase their own consumption as well as that of their workers, their suppliers, and their consumers. As said, it's the floating of all boats.*

[*Stern discusses his approach to uncertainty. What is uncertain to Stern is the discount rate to use in computing the present value of the AGW devastation, and not a probability for that AGW devastation. However, the global warming of 2ºC that Stern fears within a few generations is predictable from natural causes. The devastation is Madison Avenue, a bald exaggeration with no reasonable probability above zero. Meanwhile, the reality of Stern's corrective measures, Outcome III, is an à posteriori certainty – experience teaches us the costs and consequences of socialism, even though class never manages to be dismissed. Stern would, unwittingly apparently, exact a certain cost many times the decline in GDP that he imagines would, and the Movement declares will, occur from the phantom AGW.*

[*{Begin rev. 1/21/10.} Of course, IPCC would not agree that the present warming is predictable from natural causes. However, the case is made by a minute extrapolation of the Vostok record. Regardless, IPCC says,*

> [It is very unlikely that the 20th-century warming can be explained by natural causes. AR4, FAQ 9.2, p. 702.

[*By very unlikely, IPCC means a probability of less than 10%. Therefore the probability that modern warming is manmade is no more than 90% in IPCC's opinion (it's actually zero), and the probability of the feared future warming coming to pass must be something even less than that. Stern's cost-benefit calculus needs to be revised on the cost side to include realistic reductions in GDP through his energy restrictions, and on the benefit side, a reduction not only for present value discounting, but also for the probability that the threat comes to pass. Even if he can't estimate that latter probability, he should have a placeholder for it his model, and then he should analyze his model varying that probability. {End rev. 1/21/10.}*

[*Stern relies on two references with capitalism in the title, but never mentions it in his Review. If his model could distinguish between the Socialist story, egalitarianism, and either the practical effects of Socialism, uniform poverty, on the one hand, or the effects of Capitalism on the other, he would be in line for a Nobel Prize in Economics. Worrying about the size of the discount factor is pointless if reasonable outcomes are not included.*

> [The scientific evidence that climate change is a serious and urgent issue is now compelling. Stern Review, Introduction, p. iv.

[*So in the Stern calculus, the probability of serious damage from the Business As Usual (BAU) scenario is 1. It's not even a parameter for evaluation. It skews his results.*

> [*With good policies the costs of action need not be prohibitive and would be much smaller than the damage averted. Stern Review, Introduction, p. iv.*

[*Stern suggests a cost-benefit ratio (vernacular for a benefit/cost ratio) where he will minimalize the cost. He does so by open-loop taxing. IPCC uses an open-loop model in which it cuts off the cloud cover increase with warming. Stern's approach suffers both open-loop approximations.*

> [If no action is taken to reduce emissions, the concentration of greenhouse gases in the atmosphere could reach double its pre-industrial level as early as 2035, virtually committing us to a global average temperature rise of over 2ºC. Stern Review, Introduction, p. vi.

[*The concentration of CO2 is 0.038% (380 ppm), the second most powerful greenhouse gas. The concentration of water vapor, by far the most powerful, runs from about 1% to 4% at the surface, and averaged over all altitudes, about 0.4%. Nominally, water vapor*

concentration is 10 times as that of CO2. IPCC doesn't rely on the concentration of water vapor, much less consider doubling the total GHG concentration.

[*What the AGW model doubles is the CO2 concentration. The model has evolved because CO2 can't produce crisis level warming, so IPCC amplifies CO2 effects with some water vapor. Based on IPCC Reports, no one seriously considers doubling the concentration of greenhouse gases.*

[*Kiehl and Trenberth 1997, the foundation of IPCC's GCMs, provides an estimate of the relative effectiveness of the greenhouse gases. K&H (1997), Table 3, p. 203. In the presence of the other GHGs and averaged over clear and cloudy skies, the radiative forcing of water vapor is 63 Wm^{-2} (60%), CO2 is 28 Wm^{-2} (27%), and the total is 106 Wm^{-2} (100%). Doubling the CO2 effect would mean changing its forcing from 28 to 56 Wm^{-2} (42%) and the total to 133.5 Wm^{-2} (100%). Ignoring IPCC's destabilizing amplifying conjecture, the water vapor forcing would stay the same, but its relative contribution drops to 47%. Doubling the CO2 effect increases the total GHG forcing from 125 to 154 Wm^{-2}, an increase of 23%.*

[*What IPCC actually models is that a doubling of CO2 will cause an increase of 3.7 Wm^{-2} (AR4, ¶2.3.1, p. 140), a forcing increase of 13%. This number is erroneous, too, because it does not derive from the Beer-Lambert Law for absorption, because it is not measured, and because it does not include cloud albedo feedback.*

[*If Stern wants to double not the concentration but the radiation forcing of GHGs, he would need an increase from 125 Wm^{-2} to 250 Wm^{-2}. Doing that with unamplified CO2 requires increasing CO2 concentration by a factor of 5.3.*

[*Stern fears an increase of 2ºC, but that would put Earth's climate right at the average of the previous four warm periods over the last half million years. That is the expected increase from natural causes, which IPCC assumes is nil. Then when the modern record shows the expected increase of 1ºC or so, IPCC assumes it must be due to man. Stern doesn't have his facts straight, but the AGW model falls apart at this juncture anyway.*

[*Stern's introduction continues:*

> [Using the results from formal economic models, the Review estimates that if we don't act, the overall costs and risks of climate change will be equivalent to losing at least 5% of global GDP each year, now and forever. If a wider range of risks and impacts is taken into account, the estimates of damage could rise to 20% of GDP or more.
>
> [In contrast, the costs of action – reducing greenhouse gas emissions to avoid the worst impacts of climate change – can be limited to around 1% of global GDP each year.
>
> [The investment that takes place in the next 10-20 years will have a profound effect on the climate in the second half of this century and in the next. Stern Review, Introduction, p. vi.

[*(Stern seems to have an accidental "each year" in this description of his cost model. He likely intends an equivalent GDP, expressed as $GDP_i = GDP_{i-1} = GDP_0 - 5\%GDP_0$, and neither a declining equivalent such that $GDP_i = GDP_{i-1} – 5\%GDP_0$ (GDP vanishes in 20 years), nor $GDP_i = GDP_{i-1} – 5\%GDP_{i-1}$ (GDP is a declining exponential that passes through $0.6\%GDP_0$ at the century mark).) Using the most plausible interpretation, Stern suggests a decline of 5% to 20% of GDP, and makes that fixed, equivalent decline a certainty, based on climate science.*

[*And here's Stern's fix for the problem:*

> [Ultimately, stabilisation – at whatever level – requires that annual emissions be brought down to more than 80% below current levels.
>
> [This is a major challenge, but sustained long-term action can achieve it at costs that are low in comparison to the risks of inaction. Central estimates of the annual costs of achieving stabilisation between 500 and 550 ppm CO2e are around 1% of global GDP, if we start to take strong action now. Stern Review, Introduction, p. vii.

[*As of 2010, world energy usage is 505.9 EJ/yr, of which fossil fuels are 410.1 or 80.8%. Interpreted from AR4, WG3, Figure 4.25, p. 290. (1 EJ = 1 Quad = $1.055*10^{18}$ J, or 1 EJ = 10^{18} J. Both are in use, but 1 EJ is 1 Quad, close enough for government work.) Stern's reduction of fossil fuels to 20% of their present value drops world energy usage to 35.14% of the current value, or 177.7 EJ/yr (of which fossil fuels are 82.0 EJ/yr, equal to 46.15% of the new world total).*

[*What Stern neglects in his econometrics is that GDP has a positive linear trend with energy consumption. Using GDP by nation, a good approximation for the trend line is GDP = 0.1E $trillion/EJ. So in Stern's Project to reduce fossil fuels by 80%, he assigns a direct cost of about 1% of GDP, but neglects the indirect cost of 65% of GDP! His little tax of 1% in his calculus is negligible.*

[*Stern hopes to prevent a horrible, unethical, 5% to 20% reduction in world GDP calculated by a science he finds perfect, at a cost of 65% of world GDP. Stern cites past disaster mitigating projects with benefit/cost ratios of 13 (India) and 52 (Vietnam). Stern Review, ¶20.3, p. 434. His Project has a reciprocal benefit/cost ratio of 1/13 to 1/3.5. Less than one is a net loss, and his result is not as good as the calculation. It's actually zero, a total loss, in light of the nature of IPCC et al.'s mangled science.*

[*Here is where the socialist/climatology complex interrupts. Time out, it says. We're not going to cut back on "world (read U.S.) energy production. The demand will be taken up by the new field of green energy, cleaner technologies (Stern Review, introduction, p. i)!" The*

response: if green energy has any possibility, develop it first. Provide incentives (mentioned by Stern 211 times); let contracts. The safe approach is, as engineers say, make before break. Experiment, show success before you queer the world economy. Stern says,

> [Carbon pricing gives an incentive to invest in new technologies to reduce carbon; indeed, without it, there is little reason to make such investments. But investing in new lower-carbon technologies carries risks. Companies may worry that they will not have a market for their new product if carbon-pricing policy is not maintained into the future. And the knowledge gained from research and development is a public good; companies may under-invest in projects with a big social payoff if they fear they will be unable to capture the full benefits. Thus there are good economic reasons to promote new technology directly. Stern Review, Introduction, p. ix.

[*Time in. The first sentence is break-before-make. Companies' (notice that Stern calls them "companies", and not the pejorative, "corporations", which are to be axed into oblivion anyway) – Companies' investment capital comes from income set aside for a risk-adjusted return substantially greater than competing investment opportunities, from a market having discretionary income. Raising carbon prices, that is, taxing GDP first, reduces corporate income, defers investment, and institutes a round of cost reductions, layoffs, leading to a forecast for an ever-declining market and greater risk.*

[*Stern can take a lesson from the defense sector. Defense companies routinely develop new products with no promise of a future market. Production, if ever any, has to be won afresh in a competitive bid. The government outlines the threat, bounds acceptable solutions, and pays for the R&D. Thus what knowledge is gained in the R&D is owned by the government.*

[*In Stern's project modified to rescue the baby before the tub is drained, the government would own the technology and license it back to the energy producers. The government is responsible for the public safety, and for the infrastructure that supports GDP and provides our standard of living. The government believes Business As Usual is a threat, in fact, the AGW threat was fabricated with government money to please the government. So let the government pay up front for the remedy. When the technology is ready, production can begin. As production comes on line, it can replace the carbon emitters, Watt by Watt.*

[*Of course, Stern's GDP cost doesn't come from the world. It is to come from the self-flagellating United States, and its self-destructive, populist, self-perpetuating leadership. Underachieving nations will surely get a subsidy or a waiver from the GDP tax. As socialism practices redistributionism for individuals, so Stern would treat nations. Socialism strives to change the statistics of free economies by guaranteeing a minimum wage and minimizing the maximum wage. In theory, the more uniform the wage distribution the better, even if the citizens are poorer. This is the economics of equality, not well-being.*

[*And, as always, one must distinguish between the advertisement and the product, the propaganda and the program. It's equality between you and him – include me out! It's bipartisanship when you agree with me. It's world peace when no one is shooting at me.*

[*Redistributionalism is the propaganda for the socialist leaders who are, of course, exempt from the wage scale, and who enjoy incredible wealth from their position assured by the populism-bated, scientifically and economically illiterate constituency. This is the autoimmune pandemic of democracy. Socialism ignores the income incentive for people to produce, to become entrepreneurs, and to provide jobs through capitalism, and for businesses to invest.*

[*Stern applies the same principles to world governments, empowered by the boogeyman of AGW. Stern is the theoretician for international socialism, working to exploit AGW through fear and ignorance. Being leader of a decaying economy of equality is far more lucrative than being a distant academic on one type of dole or another.*

[*Stern's economics is a good match for IPCC science – a fraud all round.*]

Posted by John, Channel Isles | January 9, 2010 11:31 AM

Pete Ridley wrote:

1001131252

Dr. Glassman, in your paper you make reference to the Vostok ice cores, the correlation between temperature and CO2 concentration and QUOTE: A tacit assumption is that the ice core temperature swings represent the global swings UNQUOTE. A tacit assumption that I am dubious about is that the (residual) CO2 concentrations in the trapped air represent the concentrations at the time of entrapment.

[*RSJ: The theory of the ice core reduction is that the firn ice requires time to close, and that the trapped gases are the sum of gas content during the time of closure. Some have suggested that after closure, some gas still migrates, but we needn't go there because the results without migration are conservative for our purposes. Your statement is true, realizing that the time of entrapment is not an instant, but an interval, and indeed a prolonged interval.*

[*All methods of measurement require energy or matter collected in an aperture. An aperture can generally be expressed as a volume in space, or the equivalent, the product of an area, a velocity, and time. The first is analogous to the collection of gases at Mauna Loa or in firn ice. The latter is like electromagnetic detection with an antenna or lens and an integration time for the detector, so what is detected is the energy in a volume in front of the aperture times the speed of light multiplied by the integration time. Other sensors involve transducers that will convert other signals into electrical signals with a similar outcome. The net effect is that detection is always a physical low pass filter.*

[*So what is detected at Mauna Loa is the volume of the flask under continuous flow, and sealed within a minute or two. What is detected at Vostok is proportional to the average of each gas concentration over the time for the firn to close, which is a variable perhaps as short as 40 years or as long as a millennium or two. Even if you wanted to model the closure with a weighting function to account for diffusion time and varying porosity, the integration time would be quite long. To compare two methods of detection, they need to be filtered alike to a first order approximation. For example, to compare CO2 concentration at Mauna Loa with that at Vostok, the MLO record should be low pass filtered, perhaps for about a millennium. The event over the last 50 years would not be difficult to impossible to detect. Or, to compare the global warming over the instrument record going back about 150 years with that using deuterium or oxygen isotopes at Vostok, the instrument record would need to be filtered to the equivalent of about a thousand years. (More below.)*

[*Any conclusion that the present record of temperature, CO2, CH4, or N2O is unprecedented, as IPCC et al. has done, is invalid based on these employed methods*.]

Professor Jaworowski has challenged this assumption on numerous occasions but has been ridiculed by supporters of The (significant human-made global climate change) Hypothesis for suggesting that various fractionation mechanisms render the assumption invalid. I have raised this matter on several blogs without anyone responding with a satisfactory argument rejecting this possibility. I have searched the Internet and only found a few attempts to consider the possible fractionation mechanisms, none of which I found convincing. Do you have any thoughts on this?

Here are some of the questions/points that I have raised elsewhere.

Jawarowski says (Note 1) QUOTE:

> The basic assumption behind the CO2 glaciology is a tacit view that air inclusions in ice are a closed system, which permanently preserves the original chemical and isotopic composition in the gas, and thus that the inclusions are a suitable matrix for reliable reconstruction of the pre-industrial gases and ancient atmosphere. This assumption is in conflict with ample evidence from numerous earlier CO2 studies, indicating the opposite. …

[*RSJ: Jaworowski supplies his own definition of a closed system, one that the ice core method doesn't satisfy, to conclude below that the method is not a closed system. Investigators may consider ice core samples closed in the usual sense of the word, even if not permanent. The cores are kept refrigerated, but not at 0K. So the analysts reduce crack-free ice and trim away the edges to obtain better samples. Ice core gas content is surely related to "the original chemical and isotopic composition in the gas" even if that content is skewed or distorted. Absolutes such as Jaworowski would impose might render historical evidence in any field invalid.*

> It was never experimentally demonstrated that ice core records reliably represent the original atmospheric composition. …

[*RSJ: The ice core data provide a distorted window of the past composition, substantially low pass filtered by a gas-dependent process. Requiring the result to be vaguely reliable and to represent an original makes little sense as an absolute. These attributes ought to be quantified*.]

There are four other arbitrary assumptions behind the CO2 glaciology. which were used to support the first assumption above:

[*RSJ: "Were used", but no longer are? Who made these assumptions and where? Note that all four propositions date from 1985 at the latest, but successful reductions date from 1987 for both Siple and Vostok*.]

> 1. No liquid phase occurs in the ice at a mean annual temperature of -24C or less (Berner et al. 1977, Friedli et al. 1986, Raynaud and Barnola 1985).
>
> 2. The entrapment of air in ice is a mechanical process with no differentiation of gas components (Oeschger et al. 1985).
>
> 3. The original atmospheric air composition in the gas is preserved indefinitely (Oeschger et al. 1985).
>
> 4. The age of gases in the air bubbles is much younger than the age of the ice in which they are entrapped (Oeschger et al. 1985), the age difference ranging from several tens to several ten-thousands of years.
>
> More than a decade ago, it was demonstrated that these four basic assumptions are invalid, that the ice cores cannot be regarded as a closed system, and that low pre-industrial concentrations of CO2, and of other trace greenhouse gases, are an artifact, caused by more than 20 physical-chemical processes operating *in situ* in the polar snow and ice, and in the ice cores. …

[*RSJ: Invalid, perhaps, but a better expression would be no longer valid, if they were ever germane. The ice cores are closed enough.*

[*An artifact is an unexplained outlier in a data record, which investigators will often discard instead of providing an appropriate statistical analysis. Joworoski uses the term as a pejorative to urge ice core reductions are false and should all be discarded. What he would need to show is that the signal-to-noise ratio is zero. He would need to show that the Vostok patterns, for example, are all artifacts of the data reduction.*

[*IPCC et al. have certified the ice core reductions as valid, and that provides a sound basis for unbiased analyses to invalidate IPCC's own AGW model. (1) The Vostok record shows that CO2 lags temperature, which has obliged IPCC to adopt the inane defense that while CO2 doesn't cause warming, it amplifies orbital warming. But it can't establish orbital effects as a cause of warming in the first place, and when that hypothesized orbital effect wanes, it leaves CO2 amplifying nothing. (2) The Vostok record shows CO2 coming from surface waters, released according to Henry's Law at the prevailing surface temperature. Meanwhile, IPCC et al. model natural CO2 as being constant and never mention or apply Henry's Law. (3) The Vostok record shows natural forces over the last half million years caused temperatures to rise accompanied by a rise in CO2. The current warm epoch is 1ºC to 3ºC shy of matching the previous*

four warm epochs. IPCC, and the Vostok record supplies that prediction for the present, all from natural but unknown causes, and with a minimum of investigation. IPCC et al. persist in modeling with the radiative forcing paradigm, wherein the natural processes are contrarily in equilibrium, and all continuing warming and increases in CO2 are contrarily attributed to man, and ignoring the nonlinear effect in outgassing. (5) The Vostok record shows the climate repeatedly vacillating between a warm state slightly warmer than the present, and a cold state about 9ºC cooler than the present, neither modeled in the GCMs. It warms rapidly at 1.45 ºC/kyr and cools at -0.12ºC/kr for unknown reasons, not modeled in the GCMs. CO2 follows at +18.50 ppmv/kyr and -144.5 ppmv/kr, respectively but lagging by about one millennium, none of which is modeled in the GCMs. Thus the GCMs fail to account for all the data in their domain, and so are invalid. (6) The time required for firn ice to close is a mechanical low pass filter on the scale of centuries to minutes (upwards of 10^7) longer than modern instruments. This extreme filtering reduces the variability of the ice core data and causes it to mask events like that observed in the modern temperature and gas records. Nevertheless, IPCC graphs ice core and tree-ring data as smoothly blending into the modern record to create and rely on the false data that the modern era is unprecedented, and therefore due to man. IPCC et al. have certified the ice core reductions as valid, and regardless of the facts that the low pass filter time constant is gas-species-dependent and that a mass spectrum from ice core air would be a distortion of that at any instant in the past, elementary, first order considerations of the ice core record reveal unacceptable and fraudulent practices by the IPCC team.

[*The ice core records provides a coherent and informative story. This is a hurdle for both Jaworowski and IPCC et al. to overcome.*]

> However, the worst manipulation was the arbitrary changing of the age of the gas trapped in the upper part of the core, where the pressure changes were less drastic than in the deeper parts. In this part of the core, taken from Siple, Antarctica, the ice was deposited in the year 1890, and the CO2 concentration in it was 328 ppmv (Friedli et al. 1986, Neftel et al. 1985), and not the 290 ppmv needed to prove the man-made warming hypothesis. The same CO2 concentration of 328 ppmv was measured in the air collected directly from the atmosphere at the Mauna Loa volcano, Hawaii, 83 years later in 1973 (Boden et al. 1990). So, it was shockingly clear that the pre-industrial level of CO2 was the same as in the second half of the 20th Century.
>
> To solve this "problem," these researchers simply made an *ad hoc* assumption: The age of the gas recovered from 1 to 10 grams of ice was arbitrarily decreed to be exactly 83 years younger than the ice in which it was trapped! This was not supported by any experimental evidence, but only by assumptions which were in conflict with the facts … . UNQUOTE.

[*RSJ: The time shift was just another way falsely to blend data that should have been different.*]

Bender et al. said in their 1997 paper "Gases in Ice Cores" (Note 2) QUOTE:

> Differential diffusivity is a first-order effect that must be taken into account when interpreting data on the concentration and isotopic composition of gases in firn air and ice cores (7). UNQUOTE

but give no details of how this is done. The paper by Bender et. al. talks only about gravitational and thermal fractionation although in a 2006 update on his research (Note 3) he does say QUOTE:

> When gases are trapped in glacial ice, O2 is preferentially excluded … . O2 is excluded preferentially to N2 because O2 is the smaller molecule, and more easily escapes when bubbles close. The degree of exclusion is somehow related to surface insolation; … . The mediating mechanism is not known, but we can say that insolation influences some property of ice at the surface that, in turn, determines the extent to which O2 is excluded during closeoff. UNQUOTE.

The paper by Battle et el. referenced by Bender (and by the IPCC in AR4 WG1) requires the payment of a fee, which I'm not prepared to pay.

[*RSJ: Jaworowski's reference to Oeschger et al. (1985) is available in a hardbound volume from Amazon at $175, used. Authors, and especially IPCC, should liberally cite from articles to make their writings self-contained. Because IPCC intends to influence public policy, it should be obliged to provide every one of its citations on line in searchable format. It could include all the emails generated at public expense. This material is owned by the public.*]

What I haven't found discussed (other than by Professor Jaworowski) is any preferential changes to the CO2 concentration. Any help regarding any of the possible mechanisms would be appreciated.

A 2009 paper "Air fractionation in plate-like inclusions within the EPICA-DML deep ice Core" (Note 4) on the subject, which says QUOTE:

> the diffusion of chemical traces in the ice matrix may not be negligible, at least locally, on a timescale of few years. These results could be important for the interpretation of ice-core paleoclimate records. UNQUOTE.

An article (Note 5) presented at a 2005 Western States Coal Mine Methane Recovery and Use Workshop describing the technology used in the USA for treating coal-bed natural gas by removing N2, O2 and CO2 says that the molecular diameters are approximately CH4 = 3.8 angstroms, N2 = 3.6 angstroms, O2 = 3.5 angstroms and CO2 = 3.3 angstroms. This suggests to me that preferential fractionation takes place through the lattice of ice and after hundreds to thousands of years the concentrations of these substances will be significantly different to what they were in the atmosphere at the time snow was falling. It also appears to me that CO2 will more readily fractionate than any of the others.

Since so many highly regarded scientists accept the ice core re-constructions as being the "Gold Standard" for determining pre-industrial atmospheric CO2 concentrations I am obviously misunderstanding something here.

NOTES:

1) see http://www.warwickhughes.com/icecore/zjmar07.pdf

2) see http://www.pnas.org/content/94/16/8343.long

3) see http://geoweb.princeton.edu/people/bender/lab/research_ice_cores.html

4) see http://meetingorganizer.copernicus.org/EGU2009/EGU2009-7239-2.pdf

5) see http://www.moleculargate.com/nitrogen-rejection-N2-removal/Coal-Bed-Methane-Upgrading.html

Best regards, Pete Ridley, Human-made Global Climate Change Agnostic

[*RSJ: To pursue your questions, build a linear model for the air entrainment by firn ice, where each gas species has its own closure time. Run this model with a nominal mass spectrum for air, and see what you get. Plot the inputs and outputs by species over several millennia.*

[*You also need to decide what is important and relevant in the formation of the ice core samples. Mass spectral distortion might be important for the temperature reduction, being that it is dependent on the concentrations of isotopes of hydrogen and oxygen, or on the O2/N2 ratio. It seems unlikely to have any appreciable effect on the CO2 concentration. The importance will also depend on how you model changes in the atmospheric composition in the past. If it isn't changing much in the mean over a few millennia, the molecular weight effects might be nil. You will want to drive your model with a disturbance resembling the modern era, triangular pulses of temperature and CO2 over 50 to 150 years, and investigate the signal-to-noise ratio and detectability of such events.*]

Posted by Pete Ridley | January 13, 2010 12:52 PM

John, Channel Isles wrote:

1001221109

Dear Dr G,

Thank you for the completeness and thoroughness of the response on The Stern Review, I'm honoured!

[*RSJ: Your welcome, but I had to respond to the Stern Review. Stern is a significant personage because of his prior position in government, his acceptance by the media, and his position as a professor of economics. He is a key spokesman for that unsavory group of misfits who had their pictures taken in Seattle at the '99 WTO demonstrations, and he complements Pachauri's perpetual world tour on behalf of international socialism. Scientist Pachauri and Economist Stern should appear on the stage together.*]

The problem is as you say Stern paints a terrible picture of floods etc due to warming but weather improves, ecology improves, growth rates and harvests improve in warmer weather. How does Stern justify grabbing the wrong end of the stick, of absolute negativity in favour of the true sunnier outlook in his review?

[*RSJ: Pachauri does the same thing. His talks begin with a brief, superficial treatment of the science. His says nothing much with any technical depth, but instead relies on consensus, peer review, the IPCC Assessment Reports perfected by a huge team of renowned scientists, and his rebuke and slander of the skeptics. He quickly transitions into the certain catastrophe to come, a disaster that seems to get worse at each recounting. When I listen to him, I hear announcer Herbert Morrison describing the Hindenburg disaster: "Oh, the Humanity".*]

Has he calculated anywhere the positives of warmer Temp and indeed higher CO2, natures finest growth agent?

[*RSJ: No. And the reaction of the AGW proponents is denial. The Medieval Warm Period and all that is known about it, from Vikings farming in Greenland to vintners bottling in Yorkshire, are official fiction in the AGW dogma.*]

You say socialist, sorry Stern, mentions incentives 211 times. Are incentives defined as barefaced subsidies or do they include tax breaks and all myriad of socialist tools for perverting the market, and biasing the inefficient against the productively efficient?

[*RSJ: Socialist incentives are the bits left on the plate after confiscation. Socialism owns all the money. It really doesn't have to own the means of production. Writing the rules and regulations is sufficient. Its incentives are what isn't taxed or doesn't result in imprisonment.*

[*An example of Stern on incentives:*

> [Carbon pricing gives an incentive to invest in new technologies to reduce carbon; indeed, without it, there is little reason to make such investments. But investing in new lower-carbon technologies carries risks. Companies may worry that they will not have a market for their new product if carbon-pricing policy is not maintained into the future. And the knowledge gained from research and development is a public good; companies may under-invest in projects with a big social payoff if they fear they will be unable to capture the full benefits. Thus there are good economic reasons to promote new technology directly. Stern Review, Introduction, p. ix.

[*In this passage, Stern asserts that carbon pricing provides an incentive to invest, then provides a couple of reasons why companies wouldn't actually make that investment. Reading Stern to be consistent, then what he means by an incentive to invest is that carbon pricing is on the positive side of the ledger in the calculus, encouraging an invest, but not decisively so.*

[*Ultimately the freely made decision to invest is based on the internal rate of return, the present value of all the costs and earnings, taking into account probabilities and risks, and then compared with alternative uses for the money. Stern intends carbon pricing to reduce carbon emissions, but only hopes it would prove an incentive. It would change the economics not just of energy delivery, but of every economic sector except perhaps collectables. Some suppliers and some end users will choose to leave the market instead of investing. Carbon pricing will reshape our society into some unimaginable form.*

[*All the human suffering from unaffordable food and clothing, unaffordable heating and insulation, and unaffordable transportation and communication, cannot move companies to join in -- to commit suicide, to operate at a loss or to make uneconomical decisions. Uneconomical decisions are the province of government.*

[*Stern's conclusion is that "there are good economic reasons to promote new technology directly". There may be good societal reasons to promote new technology, but not economic. He is not going to re-inflate the world's GDP, deflated by carbon pricing, through a series of uneconomical actions.*

[*Socialism is government action to change the behavior of consumers and suppliers, to make them do what they aren't, or stop doing what they are. It is the antithesis of freedom. Friedman's choice title,* Free to Choose*, was perfect. Socialism is imposed by the taking of freedoms. It comes by the pound, measured by the marginal share of GDP taken by the government.*

[*Stern might promote new technologies by letting contracts for non-carbon energy development. A DOE Pentagon. While the world waits a decade or two for some economical form of alternative energy or fuel to come on line, the disaster feared in a generation or two Stern will have already visited on the world over tenfold.*

[*An alternative for Stern is simply to nationalize the fuel and energy industry. That way the government can put an end to those pesky decisions based on economics. Surely this is where he is heading.*]

You write, "Socialism consumes the wealth that freedom created". Amen to that! In fact I adore all your most exacting sentences on the socialist entity that is a belief system not a viable one. And hasn't the Massachusetts result not quite put a spanner in the works, but at least fired a warning shot. 30 years of hooch running Kennedys have come to a drunken end and Washington must sober up.

[*RSJ: Massachusetts certainly queered Obama's one party rule of patently un-American crazies. But Republicans are unlikely to make much hay out of it. Democrats believe in a strong central government, and Republicans in individualism. Their national models are also the way they run their parties. Republicans are unlikely to muster their 41 votes in the Senate to do anything constructive. John McCain, the standard bearer in '08, was notorious for breaking with the party, and he still sits in the Senate. A dam has burst, but at the moment, it's the Democrats breaking rank.*

[*Don't expect the Republicans to rise to the occasion. It's not in their nature to be coherent, especially lacking a leader. Americans send Republicans to Congress where they undergo a metamorphosis into Democrat-lites. Will that happen to Scott Brown, too? We might look for a resurgence in conservative third parties, perhaps a jelling of the confused Libertarians or a Tea Party Party, arising prematurely to split the right and breathe life into the Democrats.*

[*The tide is running out for Obama and the Democrats. High tide was the Nobel Peace Prize, tainted by an astonishing speech on the necessities of war. Twin defeats at Copenhagen on climate and the Olympics; not just defeats but reversals in Virginia, New Jersey, and Massachusetts elections; declining polls on positions and popularity even from left wing pollsters; party defections; failed bailouts (too big to fail; never too big to take over) and tax-and-spend stimuli; campaign promises flagrantly ignored; and the surging popular Tea Party movement, may be exposing the sand before a political tsunami hits in November.*

[*Obama has been buoyed by a strong bull market, but it's vulnerable to being revealed as bull, indeed. The gold price of stock is going down! An investor in dividend-less gold did better this year than one in the Dow.*

[*In 1990 to 1992, the Federal Reserve bailed out bankrupt banks still suffering from the '76 bust with below market loans. The Fed promised that the banks would loosen lending to the benefit of the whole economy. Instead, the banks bought equities. The same thing has been happening under Obama. The same regulations and agencies that sank the world economy in '07-'08 are unchanged and unscathed. Now Obama says he will bar banks from operating in the equity markets. The predictable plunge in the Dow was immediate.*

[*What has happened politically in the US is the awakening of the independents, the Weathervane Party who vote left then right. Obama's Marxist-socialist, black-separatist, roboprompter mentality is anathema to most Americans. The tactics and objectives employed by the Democrats come off no better. The economic doldrums continue unabated despite the party's best efforts to debase the dollar.*

[*Inflation is well underway – witness gold and the Dow, it just hasn't hit the CPI yet. A little recovery is going to create a little money velocity, then watch out! We're heading for another surge of unemployment on top of the 10%. Democrats may be wounded for generations, but Bushes, McCains, and Doles aren't what's needed. What we need is a small army of congressmen who will execute Scott Brown's campaign promises.*]

Meanwhile the Detroit Show had the shrill green empties of journalism calling it a "US small car revolution". It was dressed up as Americans going European with smaller hatchbacks but these cars have been available for years, nae decades, via Toyota and VW (2% US market share).

Truth is you cannot export socialism, nobody buys the idea, it has to be forced down your throat. It'll take Obama and Sterns beloved "incentives" in vast quantities to turn Americans from big cheap cars squeezed into small over-priced European sardine cans. This is not the Beatles invading the US as billed, this is desperate Detroit raiding their Euro parts bin due to lack of money to plug model gaps.

[*RSJ: The small car insurrection will become a small car revolution when Obama and Stern get their program enacted.*]

The shrill calls as usual is the anti-trust. In actuality Europeans are rejecting the socialist "downsizing" mantra and instead swallowing the US lifestyle increasingly of big and cheap (not low rent plastics however) with the increasing popularity of SUVs over here. The European socialist lifestyle is set to 'reject' but you can depend on the lefts journos to flog a dead horse at the top of its bell shaped failure curve.

You write, "Stern's economics is a good match for IPCC science – a fraud all round". Yes and Gov't is now little more than a Ponzi scheme run by criminals. Citizens are awakening and not before time.

[*RSJ: A Ponzi is just robbing Peter to pay Paul. What the U.S. government is doing is turning the US into a banana republic. We haven't begun to feel the pain of the destruction of our currency, and we are consumers for the world.*]

Posted by John, Channel Isles | January 22, 2010 11:09 AM

John, Channel Isles wrote:

1001221128

Hot off the Presses: (Climateaudit website today) there's to be an investigation, Parliamentary Enquiry, into the hacking at University of East Anglia CRU.

The Independent Review will:

1. .... determine whether there is any evidence of the manipulation or suppression of data which is at odds with acceptable scientific practice...

2. Review CRU's policies and practices for acquiring, assembling, subjecting to peer review and disseminating data and research findings, and their compliance or otherwise with best scientific practice.

3. Review CRU's compliance or otherwise with the University's policies and practices regarding requests under the Freedom of Information

4. Not Important!

Written submissions to the Committee can be made. So the pubic enquiry will take 2 years longer than the internet to come up with a 'pat' opinion we've already reached. Gov't funded policy advise is corrupt.

Link. http://climateaudit.org/2010/01/22/uk-parliamentary-inquiry-into-cru/

[*RSJ: The press release says:*

> [The Science and Technology Committee today announces an inquiry into the unauthorised publication of data, emails and documents relating to the work of the Climatic Research Unit (CRU) at the University of East Anglia (UEA). The Committee has agreed to examine and invite written submissions on three questions:
>
> [— What are the implications of the disclosures for the integrity of scientific research?
>
> [— Are the terms of reference and scope of the Independent Review announced on 3 December 2009 by UEA adequate (see below)?
>
> [— How independent are the other two international data sets?
>
> [The Committee intends to hold an oral evidence session in March 2010.]

[*Following this text is a section titled "Background", which John has summarized well in his post.*

[*I was quite heartened to see the Committee focus on the substance of the e-mails as if it were the product of whistle-blowing, and not, as IPCC and CRU had suggested, as the spoils of a criminal act.*

[*Steve McIntyre has done a first rate job mining the e-mails, the companion documents revealed, and available data records. He has shown evidence of the reprehensible practice of altering data in the preparation of IPCC Reports. I recently completed a complementary analysis which reveals false proxy reductions in those Reports.*

[*McIntyre's work is prospective, showing actions leading to a conspiracy to commit scientific fraud. When McIntyre pointed out the "fudge factor" remark and related code in a CRU program, those responsible claimed that that subroutine was not actually used in the final reports. My analysis is forensic, showing falsified data in the final reports. The abundant charts are complete, and the text is in the works for a new entry in the* ***Journal***. The analysis reveals neither the method nor the actors, but shows the overt act of falsification completed in the Reports.

Posted by John, Channel Isles | January 22, 2010 11:28 AM

John, Channel Isles wrote:

1001231657

In addition to my last post on news about the UK launching a public investigation into the UEA CRU hack is 3 news articles on the front page of the Financial Times website today (23 Dec). But firstly some December FT articles as a warm up on how well global warming is going post Cop-out-hagen 15:

EU Reflects on Climate 'Disaster (FT 22 Dec '09)

Europe's environment ministers added to the chorus of gloom over the outcome of the Copenhagen climate summit... Diplomats acknowledged that the EU's strategy of offering to deepen its emissions cuts – from 20 per cent below 1990 levels to 30 per cent – if other nations showed comparable efforts had failed to provide leverage over the US or China.

This FT story is flanked by further articles entitled; UN Urges End to Climate Wrangling (23 Dec); Climate Change Alliance Crumbling (22 Dec) and 'We should change tack on Climate after Copenhagen' by Bjorn Lomborg who writes' "It is not that man-made global warming isn't real or that we don't need to take meaningful action to combat it. It is and we do... call me a cock-eyed optimist, but Copenhagen's failure strikes me as being too abject to ignore... They would have done better to have acknowledged their impotence and gone home empty-handed. Never has the fundamental bankruptcy of the carbon-cutting strategy seemed more obvious."

Lomborg should indeed listen to calls he's a 'cock-eyed optimist'. He can't admit the horse is stone cold dead, to him it's just about which body position you take up to flog it to get it moving!

[*RSJ: At most every opportunity, Lomborg likes to throw in the concession that AGW is real. This is wrong, it severely weakens his authority, and it is certainly not helpful in combating the fraud. The concession underlies the foolish idea that a nation reducing its CO2 output another 10% is a value.*]

That's Decembers chilling news headlines for the warmists. As mentioned today we have 3 articles at the FT with the leading article headlined, 'UN Climate specialist defends Glacier Report'.

It reads, "The chief of the Nobel Prize winning United Nations climate change panel admitted on Saturday that its dire warning that Himalayan glaciers could disappear by 2035 was "an error" ... Seeking to quell a controversy with great resonance in his native India, Rajendra Pachauri, chief of the UN's IPCC, admitted there was no hard science to back the "regrettable" claim that Himalayan glaciers could disappear within three decades… ."

The claim was part of the wide-ranging 2007 report... "There's been this error, but that in no way detracts from the value of the report or the impact it has had," Mr. Pachauri told journalists in Delhi. "Rational people see the larger picture and are not going to be distracted by this one error."

Jairam Ramesh, India's environment minister, has been openly disputing the IPCC's doomsday predictions on Himalayan glaciers, arguing that there was no evidence to support what it called misleading claims ... .

In November, Mr. Ramesh's ministry released a report that concluded that some Himalayan glaciers were indeed receding but not a pace that was "historically alarming". Mr. Pachauri criticised the ministry's report as "'schoolboy science".

[*RSJ: Pachauri's handling of this Himalayan glacier issue reveals a lot about him and IPCC's poor methods. He practices cranking up the depth of the coming disaster speech by speech, trying to reach a political tipping point. Secondly, he is quick to react with ad hominem attacks. Thirdly, he hides behind the curtain of compromised peer-reviewed literature, which would have refused to publish Hasnain's work. I fully expect better science from school teachers, if not school boys, than is practiced by Pachauri, IPCC, and many of the professional journals.*]

However, the spotlight fell on the IPCC last week, after New Scientist, the popular magazine, traced the IPCC's warning of the potential disappearance of Himalayan glaciers by 2035 to its own 1999 article quoting an Indian glaciologist Syed Hasnain.

> Mr. Hasnain never offered such a time frame in any peer-reviewed literature, but the New Scientist reference was included in a report by the WWF, the environmental campaign group, from which it eventually found its way into a chapter of the IPCC report.

http://www.ft.com/cms/s/0/bbd4706e-0825-11df-991d-00144feabdc0.html

The 2nd FT article is headlined, "Scientists in glacier claim controversy" and repeats the Himalayan glacier story and the EAU CRU scandal.

http://www.ft.com/cms/s/0/48602898-051f-11df-a85e-00144feabdc0.html

And finally under the Law of 'It Doesn't Rain, It Pours' the 3rd FT article, reads "UN abandons climate change deadline (FT 20 Jan)

> The timetable to reach a global deal to tackle climate change lay in tatters on Wednesday after the United Nations waived the first deadline of the process laid out at last month's fractious Copenhagen summit.
>
> Nations agreed then to declare their emissions reduction targets by the end of this month. … But Yvo de Boer, the UN's senior climate change official, admitted the deadline had in effect been shelved.

http://www.ft.com/cms/s/0/87479ee2-0600-11df-8c97-00144feabdc0.html

Bearing in mind the FT's usual pro-AGW, pro-Regulation and pro-EU/EC doctrine, at least right up to Cop-out 15 one must conclude AGW is well and truly crumbling before our very eyes. To see the UK's most "prestigious" climate research unit under investigation, the Indian Gov't sticking it to its very own Nobeller, Dr. Pachuari, with only the EU muttering uncontrollably about continuing to flog this dead horse. I think we're near the end Dr. G.

Shortly the only matter left will be some public accountability for this global scientific and financial fraud and prosecution of those responsible and attempt to recover misappropriated funds. You'll not be surprised the British Gov't has already dropped in the sentence "global warming advised by scientists" into their recent TV propaganda campaigns past couple of months. Trying to draw a line between crony scientists and their criminal hides.

[*RSJ: We still have actions being taken to treat CO2 as harmful, and to reduce carbon emissions everywhere. The US Environmental Protection Agency findings are but the latest, and are the precursor to ghastly, pointless restrictions. The stake has not been driven through the heart of this monster. The post-mortem is a bit premature.*

[*Fred Singer has proposed some additional action needed today. Listen to him here:*

http://www.youtube.com/watch?v=QM9WsN6Q2Qo&NR=1]

Posted by John, Channel Isles | January 23, 2010 4:57 PM

John, Channel Isles wrote:

1001241758

Yes just caught up with the news too. The Times over here is now linking to calls for Rassputins, sorry Dr Pachuari's resignation on an Indian channel. Not only the Himalayan 'mistake' but also receiving backhanders from green industry.

Is this the infamous IPCC 'tipping point' Dr G ?

[*RSJ: The tipping point made famous by James Hansen, which is probably unique, is the accumulation of ACO2 that starts an irreversible warming to catastrophe.*]

http://eureferendum.blogspot.com/2010/01/pachauri-must-resign.html

Linked from The Times article on the Himalyan 'just a human error'

http://www.timesonline.co.uk/tol/news/environment/article6999975.ece

Absolute melt down in more ways than one!!

[*RSJ: IPCC should be disbanded for fraud, with prejudice for lack of an anthropogenic climate threat. Justice would have it go down with Pachauri at the helm. The vortex should take down the US EPA, a handful of big name US and UK climatologists, and a few professional journals, too.*

[*Having Pachauri go down like an ordinary politician, a petty thief, would be a shame. He's the leader of the greatest fraud perpetrated on the public, next to socialism. As criminals, Bernie Madoff pales in comparison to Rajendra Pachauri.*]

Posted by John, Channel Isles | January 24, 2010 5:58 PM

John, Channel Isles wrote:

1001251235

I think Dr Pachuari is under pressure because as you've mentioned before the 'style' of how AGW'ers slap away skeptics. Namely disparage and treat others with thinly veiled contempt. So I've a feeling Pachuaris slap-down of the Indian Environment ministers questioning of the Himalayan expose as "school boy science" didn't help him. Nobody is more dangerous than your own kind and Indian politics like every country is actually a very small world to throw your weight (or snotty attitude) around.

The British Prime Minister here was asked today in a Press Conference about the IPCC science. His response was to mumble about "the academic science". His response last month at Cop-out 15 about Climategate was to call skeptics "flat earthers". His answers resemble schoolboy name calling rather than sound reasoning. Hope he doesn't run out of name tags to sling across between now and the election in June!

Calls for Dr Pachauris head are increasing;

'Pachauri must resign at once as head of official climate science panel'

Geoffrey Lean, Daily Telegraph (24 Jan)

http://blogs.telegraph.co.uk/news/geoffreylean/100023489/pachauri-must-quit-as-head-of-official-science-panel/

The Daily Telegraph (25 Jan 2010) in Australia reports a whole range of natural disasters the IPCC linked to AGW are now under extra scrutiny. 'The United Nations climate science panel faces new controversy for wrongly linking global warming to an increase in the number and severity of natural disasters such as hurricanes and floods.'

http://blogs.news.com.au/dailytelegraph/timblair/index.php/dailytelegraph/comments/credibility_strengthened

Finally here's a nice roundup of Climategate articles and choice quotes from the hacked CRU's emails:

http://z4.invisionfree.com/Popular_Technology/index.php?showtopic=3570

[*RSJ: While newsmakers continue to concede the existence of AGW, e.g., Bjørn Lomborg, James Inhofe, and Geoffrey Lean, IPCC and the fraud will continue. Pachauri will be at risk only for graft and intemperance.*]

Posted by John, Channel Isles | January 25, 2010 12:35 PM

Diarmuid Mac Carthaigh wrote:

1001252104

DR G

Thank you for your time, dedication, and integrity. God willing truth will out. Either way I believe I and mine and many more owe you and people like you a debt of gratitude.

Sincerely

Posted by Diarmuid Mac Carthaigh | January 25, 2010 9:04 PM

John, Channel Isles wrote:

1001270851

The IPCC is not infallible (shock!) - Gavin Schmidt, Climateaudit (19 Jan 2010)

> In summary, the measure of an organisation is not determined by the mere existence of errors, but in how it deals with them when they crop up. The current discussion about Himalayan glaciers is therefore a good opportunity for the IPCC to further improve their procedures and think more about what the IPCC should be doing in the times between the main reports.

http://www.realclimate.org/index.php/archives/2010/01/the-ipcc-is-not-infallible-shock/

[*RSJ: The Princess and the Pea: Gavin Schmidt's sensitivity to the Himalayan glacier error. A better analogy might be what we in the States call picking the fly specks out of the pepper.*]

> **Top climate change adviser calls for honesty from scientists in global warming debate** (27 Dec '09)
>
> Scientists should be more honest and open about the uncertainty of predicting the rate of climate change, the Government's chief scientific adviser said.

http://www.dailymail.co.uk/news/article-1246404/Top-climate-change-adviser-John-Beddington-calls-honesty-scientists-global-warming-debate.html

[*RSJ: Praising with faint damnation. IPCC was honest, open, and competent, but left a little room for improvement. Failed science, but plays well with others. Professor Beddington would fit right in with mainstream American school teachers. Is his assessment of Bernie Madoff and Joe Stalin that they could have been more open and honest?*]

> **Met Office to review 60 years of data amid claims figures were doctored as thousands take to streets to protest** (5th Dec '09)
>
> A Met Office spokesman said: 'The Met Office does intend to release data from more than 1,000 weather stations.
>
> 'It will be available on our website.'

http://www.dailymail.co.uk/news/article-1233426/Met-Office-review-60-years-data-amid-claims-figures-doctored-support-climate-change-fears.html

[*RSJ: So the Met Office will fix some data archives. What will be the fix for the misinformation IPCC published in its Third and Fourth Assessment Reports? And for the errors in physics and modeling?*]

Posted by John, Channel Isles | January 27, 2010 8:51 AM

John, Channel Isles wrote:

1001271356

Have we reached 'tipping point' or is this a snowball Dr G ?

A Times article headed, '**Sloppy science is seeping into the climate watchdog**' (24 Jan) goes on to mention,

"it looks this weekend as though Glaciergate could be followed by Disastergate, Hurricanegate, Floodgate and Droughtgate. It is beginning to look as though the more alarming assertions published by the IPCC — that climate change is behind the increasing frequency of, and damage caused by, natural disasters — may not have been properly peer-reviewed. They lack the gold standard of credibility that we have been assured the panel's 3,000-page assessment enshrines."

http://www.timesonline.co.uk/tol/comment/columnists/guest_contributors/article6999815.ece

[*RSJ: This is written by Charles Clover. His next paragraph reads,*

It is a mess. And politically it couldn't have come at a worse time, just as the election of a Republican senator in Massachusetts brings the end of Barack Obama's super-majority in the Senate, in a Congress in which only one party believes in doing anything about global warming. The drip, drip of error gives ammunition to even the most scientifically illiterate Republican senator who wants to talk down Obama's climate bill. The frail global pact to reduce emissions that survived the ill-fated Copenhagen conference will not survive the defeat of cap-and-trade in America.

[*My policy here is not to censor (except the vulgar or commercial), and yet not to give an audience or credence to twaddle, twassel, or drivel. If I'm going to criticize someone, I will do it for cause, not as an ad hominem. So I expanded the cited part of this article so everyone could see that it belongs on mediamatters.org, not here. And I will heed the advice of my mother -- if you can't say something nice about someone, don't say anything at all.*

[*Al Gore served honorably in Vietnam.*]

Meanwhile the UN's IPCC has published a rebuke of a Times article:

"The January 24 Sunday Times ran a misleading and baseless story attacking the way the Fourth Assessment Report of the IPCC handled an important question concerning recent trends in economic losses from climate-related disasters. The article, entitled "UN Wrongly Linked Global Warming to Natural Disasters", is by Jonathan Leake.

"The Sunday Times article gets the story wrong on two key points. The first is that it incorrectly assumes that a brief section on trends in economic losses from climate-related disasters is everything the IPCC Fourth Assessment Report (2007) has to say about changes in extremes and disasters. … The second problem with the article in the Sunday Times is its baseless attack on the section of the report on trends in economic losses from disasters. This section of the IPCC report is a balanced treatment of a complicated and important issue. It clearly makes the point that one study detected an increase in economic losses, corrected for values at risk, but that other studies have not detected such a trend. The tone is balanced, and the section contains many important qualifiers. In writing, reviewing, and editing this section, IPCC procedures were carefully followed to produce the policy-relevant assessment that is the IPCC mandate."

http://www.ipcc.ch/pdf/presentations/statement_25_01_2010.pdf

You mentioned Dr G the IPCC snub squabbles amongst the peasants from Mount Lofty Perch. It appears they've come off their mountain and joined in amongst mere mortals. I predict they're making enemies of some of the once nicely compliant sheep among the media and they'll get shot to pieces in the cross-fire remarkably quickly!

[*RSJ: I agree. IPCC and the AGW movement have taken a number of body blows, and are suffering a defection of loyalty from the media. The statement you cite is amateur PR, devoid of substance, and a hollow defense of its workmanship. It's much like Pachauri's speeches of late.*]

Here's the IPCC's own 'principles' on including non-peer reviewed sources for use in IPCC Reports, such as the WWF research used for Glaciergate (see last page of below PDF marked 'Annex 2'). It basically says it should still be reviewed by "experts" and the IPCC Authors/Section Team and properly referenced as un-peer reviewed.

http://www.ipcc.ch/pdf/ipcc-principles/ipcc-principles-appendix-a.pdf

[*RSJ: The document, called "Appendix A to the Principles Governing IPCC Work; Procedures for the Preparation, Review, Acceptance, Adoption, Approval and Publication of IPCC Reports", is a bureaucratic masterpiece. In 15 pages, it says "shall" four times, and "should" 62! It is filled with the passive voice, which is a bureaucrat's way to avoid making someone responsible for what is presented. The worst of the document, though, is the fact that under IPCC principles and leadership, the agency could violate principles of science, physics, and modeling, could fudge data, and misrepresent data through graphical sophistry.*]

It seems sloppy science just happened to get into the IPCC Report which just happened to coincide with Dr Pachuari accepting grants ($25,000 from US and £25m from the EU) for his Delhi research centre, not to mention fueling his mushrooming 'consultancy' side-line while not full-time at work at the IPCC. This includes, "adviser to Credit Suisse, Deutsche Bank and the Chicago Climate Exchange — all of which stand to benefit from carbon trading" to quote the Times.

Let nobody accuse Al Gore or Dr Pachuari of being in the pocket of "Big Carbon".

Posted by John, Channel Isles | January 27, 2010 1:56 PM

John, Channel Isles wrote:

1001281223

The mainstream media may be dealing in "twaddle, twassel, or drivel" but isn't it a bit more pleasant round here when they're laying into the AGW crew? It may not be pure academic science as we know it but it's a social activity which the mainstream media is duty bound to comment and indeed stir comment on. Having had 10 years of a corrupt media black-out of sceptics' views we now have at least a soapbox. It feels good, so don't knock it Dr. G ;)

[*RSJ: You and I stand on different thresholds, both frustrated. You were on the verge of gaining what Americans are on the verge of losing.*

[*The thought occurred to me to question the journalistic values of TimesOnLine, having published the loony article from Charles Clover, but I didn't. Nor did I charge mainstream media with anything, at least at this time. And I have not read anything else of Clover's. But the sample smacks of the socialist tracts handed out as fliers on street corners in the '30s. The writing was trash.*

[*You may have resonated favorably to Clover's charge that IPCC's work may not have been "properly peer reviewed", the "gold standard of credibility". However, proper peer review is a festering bulwark that conceals the scoundrels behind the IPCC Reports. Far from a gold standard, peer-reviewed journals have abandoned scientific ethics to be house organs for fraud and pseudo-scientific dogma.*

[*Just because Clover criticized IPCC doesn't mean that I want any association with him, much less recommend his writing.*]

Your Mum may have been right with "if you can't say something nice about someone, don't say anything at all". But she hasn't met our British Prime Minister yet. This career politicians sole skill is to dish dirt, smear and use leaks on the opposition and his own Party members to rise the slippery pole to our nations leadership. I'm not kidding Gordon Browns only known asset is sh*t stirring. This now rotting Scottish carcass ruined the countries finances as Chancellor and now as leader needs Machiavellian maids to keep him clinging to the power he lusts having had 3 Party challenges for him to 'just go ...please!'. Brown is a pathological liar, even your Mum would change her tune I'm positive.

[*RSJ: Trite, but Mark Twain never met Gordon Brown, eh?*]

And yes Al Gore may have served honourably in Vietnam, another American mega successful global foreign policy decision. Which is probably why he's prepared to flog another global policy failure with such utter conviction, that of climate change.

[*RSJ: The Vietnam war was a victory for the left, and not all that much different from the war on climate. Gore was a wannabe anti-war activist, but kept his mouth shut out of respect for his Senator father's wishes. His career was rather like John Kerry's, the preceding Democratic Presidential candidate. Where Kerry manufactured a hero status for himself and a quick release, Gore was openly modest about his involvement. Kerry became a turn-coat after the war, Gore waited for the global warming opportunity to raise his rabble. Gore's a lefty, tried and true -- intellectually limited, dishonest, nothing more.*]

Let's see how Gore fights the climate change debate he's been dodging for nearly a decade. Most interesting bit of this Vid is 4 mins in on Gore's answer to discussing Carbon Fraud, sorry Trading, scams with Enron's cheid [?] a decade ago:

http://www.youtube.com/watch?v=-FUrL-zigiI

[*RSJ: In this video, riotous idiots harangue Al Gore at a book signing until Al's thugs escort them out. Regardless that Gore is wrong about most everything, I found myself on the side of the thugs. Let the man sign his books! Incivility is worse than doing nothing. It harms the cause.*]

And being sued by 30,000+ scientists for Global Warming Fraud

http://current.com/items/91513098_youtube-al-gore-sued-by-over-30-000-scientists-for-global-warming-fraud.htm

[*RSJ: I actually sent in my application to join that group of 30,000, but it never registered. I pursued it no further and now I'm glad I didn't. Suing Al Gore was no part of the program for the first 30 to 31 thousand.*

[*John Coleman is a pretty good spokesman for debunking AGW. When asked about the Hockey Stick, he referred to the work we know as Steve McIntyre's, showing that Mann's statistical analysis was flawed, and producing a hockey stick for any input. McIntyre's analysis appears to have withstood the challenges. However, with the CRU emails and my analysis, we now have good evidence that the blade of Mann's hockey stick was manufactured by gluing instrument data onto the end of problematic proxy data. Still, it's possible, but not highly probable, that both criticisms are valid.*

[*Coleman properly credited Mann for creating the phony hockey stick. But then he said an IPCC panel bought it and made it "a cornerstone of their whole campaign." True enough, I suppose, but there's more to the story. IPCC first made Mann lead author on the section that adopted his hockey stick. Then because IPCC uses incestuous author review instead of peer review, he was able to see his work adopted by the organization that employed him. He submitted and approved his own work on behalf of IPCC.*]

I wouldn't question Gore's determination to follow a lost cause but I would question his balls, marbles, scruples, principles and humanity!

Meanwhile back to the public investigation on Climategate some interesting comments on the Climateaudit thread. Looks like George Butterworth of (I think!) the Times has posted,

> "we are struggling to define the approach and structure for the input to the Committee. ... Following this outline avoids all criticism about political interest". See posts near bottom of the page:
>
> http://climateaudit.org/2010/01/22/uk-parliamentary-inquiry-into-cru/

The answer to their struggle is simple. David Mandleson Business Secretary who heads up the Dep't that oversees the investigating committee wants it to find the scientists of the CRU responsible for dodgy science. This is why the Gov't had dropped into their recent TV Ad campaign "advised by scientists" and why PM Gordon Brown's recent replies on Climategate questions shoved the responsibility on "academics".

Mandleson is the ultimate political powerbroker. He wants the investigation to blame the political stance on climate science being mis-advised by their crony scientists. The public investigation is little more than an adept move to wash blame from the true scum, the politicians.

[*RSJ: I blame the politicians for the disaster called public education in the US. We're now on our third or fourth generation of scientifically illiterate teachers, journalists and politicians who know nothing better than a one party, socialist state, and have scum for ethics.*

[*What politicians have done respecting the AGW nonsense is picayune compared to what they are planning. Fortunately a coalition of sensible and reactionary conservative heads remain to keep Kyoto and Copenhagen and Cap & Trade from gaining any real traction. Now we need to feed them with facts and science to offset the Gores and binary (as in one who can take a far left stance AGW and accuse his opponents of illiteracy) Clovers before any serious damage is done.*]

The 'drops' in the recent British Gov't TV Ad campaign 'Act on CO2' however exposes the lie as only the politicians have the authority to change the TV Ad campaign that covers their corrupt arses. There's no other reason for dropping such a line in a TV commercial.

[*RSJ: We've had a pair of seismic events in the last week or so. One is a legal decision handed down by the US Supreme Court. McCain's law restricting corporate and union advertisements of political positions 30 days before an election was reversed. Perhaps now the carbon salesmen, researchers, and developers will be encouraged to come forward in defense of reason.*

[*The other Earth shaker is our Brown getting elected to the Senate. Fortune smiled on us. Running on a clean, rightist platform, he ended one party rule in a rare special election in one of our radical left States. Obama had one year, but blew it.*]

You mentioned the stunning support for war in Obama's acceptance speech of the Nobel Peace Prize. Did you watch his State of the Union speech last night? Here he surmised "even if the facts were in dispute" it didn't take away any of his necessary investments in huge green programmes. Namely take away the 'green' science and it was still of benefit to society to blow $Billions at green research and green energy. Stunning!

I've heard of 'shifting the goalposts' but isn't this like moving the entire pitch to a new country all together??

[*RSJ: The state of the union speech was stunning for its incompetence. It's being torn to shreds in broadcasts today.*

[*Here's a capsule summary, recognizing that some choice bits are not included. Obama intends to continue his far left agenda to nationalize whatever he can. Since he has lost one party rule, so essential to any dictator, he has chummed the Republican waters by offering to support nuclear power, off-shore drilling, and even coal-fired generators. To shore up his support on the left, he has offered to sacrifice our "Don't Ask, Don't Tell" policy for gays in the military. For those who criticize his fiscal delirium, he renewed his accusations against Bush'43, and offered a meaningless, selective, future spending freeze. The whole assemblage was transparent, raising publicly despised earmarks to the presidential level.*

[*Critics are rightly saying that Obama is blind to the mood of people, translating demonstrations and a people's trifecta of defeats at the polls into some kind of emotional unrest caused by the still sagging economy. The man seems incapable of understanding Americans' abhorrence of one party rule, and of socialism. Obama has no real life experience -- he rose to power on our Affirmative Action program, as a birthright – and his world view is that all good lies in collectivism and victim compensation, learned at the feet of Reverend Wright and Saul Alinsky, and on the pillow of Michelle.*

[*As far as that goes, here's one of the best little videos on economics you're ever likely to see, resurrected under the title "Milton Friedman: What Saul Alinsky Never Told Obama", impervious imperialist Phil Donahue standing in for Saul Alinsky, circa 1979:*

http://www.youtube.com/watch?v=vjH4QBSwWlg

[*Obama's 2010 State of the Union message kicked off his ever more probable defeat, facing emasculation in November and ousting two years later.*]

Posted by John, Channel Isles | January 28, 2010 12:23 PM

John, Channel Isles wrote:

1001281223

Hi Dr G,

Will respond later to above and lots more news too. In the meantime a quick bit of fun to lighten the day, news Dr Pachauri has a new fictional book out although the IPCC Reports get pretty close to that anyway! Read the comments after the article, carnage ;)))

http://climateaudit.org/2010/01/30/return-to-almora/#comment-219172

[*RSJ: Nero's been fiddling while Rome was burning.*

[*Also see the link to*

http://wattsupwiththat.com/2010/01/30/ipcc-now-in-bizzaroland-pachauri-releases-smutty-romance-novel/

[*For his sake, I hope this work is better than his last two works of fiction, the Third and Fourth Assessment Reports. He's going to need the income.*]

Posted by John, Channel Isles | February 2, 2010 8:40 AM

John, Channel Isles wrote:

1002031507

I'm pretty sure the UN IPCC have reached its beloved 'tipping point' because I know I have reached it trying to keep up with all the news. It's carnage out there!

I've about a dozen windows open on latest news stories since yesterday and another half dozen today on IPCC falling apart. While I sort wheat from chaff and try to put into some order here's today's Dr. Rajendra 'Rasputin' Pachauri's' latest denial (Warning: Sick Bag required);

http://www.ft.com/cms/s/0/260c9290-10d7-11df-975e-00144feab49a.html

My favourite Rasputin quote apart from the conspiracy theory idea he has is, "It's not as though we have gone through everything for a second time to apply a fine tooth comb and see whether there are any other errors. There are others who are now working overtime on that kind of job."

That's comforting isn't it? Only Pachauri's first rebuff on 'Glaciergate' was the error was a "one off" and didn't undermine the bulk of peer reviewed literature. And now he has people working "overtime" re-peering on what was supposed to be peer reviewed. Talk about making work for yourself!

[*RSJ: Pachauri's opening shot in the interview was*

> It doesn't take a genius to arrive at the conclusion that apparently this is carefully orchestrated. These things are certainly not happening at random. The one unfortunate thing that has happened is the mistake that the IPCC made on the glaciers. We have acknowledged that; we have put that on our web site.

[*IPCC's Assessment Reports are riddled with error, and except for the fact that they have a strong influence on politicians, only serve to give a bad name to science. For a list and analysis of the most flagrant of those errors, see* ***Fatal Errors*** *in the* ***Journal****. This paper is not part of any orchestration, but flows from science applied to IPCC's own writings and data.*

[*Earth's climate is not, as IPCC has concluded, regulated by the greenhouse effect, much less CO2. The entire alarm is a fraud perpetrated certainly for power and money.*

[*Pachauri's complaint is that he has been obliged to defend an irrelevant error in IPCC's ultimate conclusions. In his scheme, he should be free to address policy makers based on a captive system of peer review and doctored data.*

[*Pachauri is supported by a conventional wisdom from academics that the scientific method includes publication in peer reviewed journals.*

[*Science is embodied in models of the Real World that have demonstrated predictive power. Period.*]

It appears they didn't peer review their claims about Holland either. 'Hollandgate'. We're running out of 'gates' Dr. G !!

[*RSJ: Peer review wouldn't have helped.*]

http://climateaudit.org/2010/02/03/latest-ipcc-exaggeration/

[*RSJ: For our readers, the IPCC passage debunked is the bold part of this section:*

> It is apparent that climate variability and change already affects features and functions of Europe's production systems (e.g., agriculture, forestry and fisheries), key economic sectors (e.g., tourism, energy) and its natural environment. Some of these effects are beneficial, but most are estimated to be negative (EEA, 2004b). European institutions have recognised the need to prepare for an intensification of these impacts even if greenhouse gas emissions are substantially reduced (e.g., EU Environmental Council meeting, December 2004).

> The sensitivity of Europe to climate change has a distinct north-south gradient, with many studies indicating that southern Europe will be more severely affected than northern Europe (EEA, 2004b). The already hot and semi-arid climate of southern Europe is expected to become warmer and drier, and this will threaten its waterways, agricultural production and timber harvests (e.g., EEA, 2004b). Nevertheless, northern countries are also sensitive to climate change.
>
> **The Netherlands is an example of a country highly susceptible to both sea-level rise and river flooding because 55% of its territory is below sea level where 60% of its population lives and 65% of its Gross National Product (GNP) is produced.** As in other regions, natural ecosystems in Europe are more vulnerable to climate change than managed systems such as agriculture and fisheries (Hitz and Smith, 2004). Natural ecosystems usually take decades or longer to become established and therefore adapt more slowly to climatic changes than managed systems. The expected rate of climate change in Europe is likely to exceed the current adaptive capacity of various non-cultivated plant species (Hitz and Smith, 2004). Sensitivity to climate variability and change also varies across different ecosystems. The most sensitive natural ecosystems in Europe are located in the Arctic, in mountain regions, in coastal zones (especially the Baltic wetlands) and in various parts of the Mediterranean (WBGU, 2003). Ecosystems in these regions are already affected by an increasing trend in temperature and decreasing precipitation in some areas and may be unable to cope with expected climate change.
>
> The possible consequences of climate change in Europe have stimulated efforts by the EU, national governments, businesses, and Non-Governmental Organisations (NGOs) to develop adaptation strategies. The EU is supporting adaptation research at the pan-European level while Denmark, Finland, Hungary, Portugal, Slovakia, Spain and the UK are setting up national programmes for adapting to climate change. Plans for adaptation to climate change have been included in flood protection plans of the Czech Republic and coastal protection plans of the Netherlands and Norway. AR4 WGII: Impacts, Adaptation and Vulnerability, ¶12.2.3 Current adaptation and adaptive capacity, p. 147.

[*The debunking flows from real data alleged by Vrij Nederland online. It says that the figure of 55% underwater should be 20% and the 65% of GNP should be 19%.*

[*Regardless, no one should have given any credence to this entire section, and consequently, perhaps, the whole of the product of Working Group II. It reads like a throwaway section someone was obliged to write to fill an outline slot. The little bit about the Netherlands is the only specific or quantitative example in a passage of inanities. Better stuff I'm sure has been written overnight by grade school students who did no research. Sally in Peanuts wrote more profoundly:*

> "This book told me more about penguins than I ever wanted to know."

[*Working Group II is where the ecologist meets the climatologist.*

[*Where has investigative news reporting gone?*]

Posted by John, Channel Isles | February 3, 2010 3:07 PM

John, Channel Isles wrote:

1002081934

James Hansen of GISS NASA fame has written to journalist Kirtland Griffin after he wrote 'If It's That Warm, How Come It's So Darned Cold?' to defend against the claim the decade of cooling.

I've no choice highlights from the article (see link below) which isn't very long but a laugh a minute as Hansen's denial looks like that of a drowning man grasping at straws. I'm sure your enquisitive mind will punch even more holes in Hansen's resposte.

http://www.examiner.com/x-13886-Environmental-Policy-Examiner~y2010m1d27-James-Hansen-of-NASA-defends-against-claims-of-a-decade-of-cooling

[*RSJ: The paper by Hansen, Reto Ruedy, Makiko Sato, and Ken Lo, which I take to be dated 1/27/10 by its file name (why don't people date their work?), says:*

> [We know of no cases of fraud in analyses of global temperature measurements.

[*What fraud then DO these four know about?*

[*How about fraud in the peer review process?*

[*And by the way, was this new paper peer reviewed? Was it published? Do we dare read it before passes these two milestones of the academic scientific method?*

[*Are these witnesses aware that someone from IPCC or CRU glued temperature measurements onto the end of dozens of proxy records from tree rings and from ice cores, and then bent the data to make the combined records look contiguous? Do they consider these preparations to be analyses of global temperature measurements? Do they consider them not to be cases of fraud?*

[*The problem here is letting the accused, witnesses, or experts respond to skeptics' questions by throwing essays over the transom.*

[*IPCC glued modern records of temperature onto proxy and ice core reductions for CO2, CH4, N2O, SO2 and T, sometimes distorting*

those latter records, to create the false impression that the modern record is unprecedented, and therefore modern warming must be manmade. The conclusion would not be a logical consequence of the premise, even if the premise were true. Now these experts use the fact that the current cold trend is far from unprecedented to urge that AGW must still be true. Fallacy here is an art form.

[*Hansen et al.'s own chart of temperature records labeled HadCRUT and GISS contradicts their position. We don't want to let the accused select the length of the span for the trend that typifies climate temperature, the climate memory. So we'll examine every possible, best fit, linear span from 1990 to the last data point, 2008, using the authors' expanded chart on the right of its Figure 5 on page 6. The trends for both HadCRUT and GISS were a maximum for 1992–2008 (15 year trend). Except for 1999–2008 and 2006–2008, the trend has turned downward every year, for both traces, and the downturn is accelerating. For both records, the trend turned negative in 2001–2008 (6 year trend), and remained negative for every trend interval since. In other words, the trend taken over any interval from 1 year to 17 years shows the rate of climate warming declines as we shorten the memory. And over every span from 1 to 6 years, the weather has been cooling. It will be eligible to be called climate as soon as the curves extend through this year.*

[*This cooling trend is real, is sensed by everyone but IPCC climatologists, and, to their embarrassment, is not predicted by their models as man and beast, the ocean and the biosphere continue to emit Gigatons of CO2.*]

Posted by John, Channel Isles | February 8, 2010 7:34 PM

John, Channel Isles wrote:

1002110450

It may seem trivial of me during this time of exploding scientific revelations but here's a YouTube vid of a recent meeting of 'The Society of Environmental Journalism' (well meaning Eco Warriors spreading truth or Soldiers of Marxist Propaganda spreading insidious garbage depending on your viewpoint!) asking Al Gore about the 9 scientific errors in his 'An Inconvenient Truth' film. Note this is the first time in 4 years Gore has had a Q&A session with any Press (probably only Mao and Stalin has had an easier ride and less scrutiny during their terms in high office).

http://www.youtube.com/watch?v=ZM3RpZNm0Nc&feature=related

The journalist asks what is Al Gores response to a British Judges findings some years ago (pre-Gore press Q&A embargo days) there are 9 scientific errors? 'Green' Gore ignores the error strewn bit and says at least the Judge "still ruled to approve it for schools" after some parents here took the matter to court to block its distribution to school children.

I know it seems 'trivial' but this ex-politician, ex-VP of the United States and current multi-millionaire Eco tycoon and self ingratiating Prophet trying to save humanity comes up a long way short in my book with his answer.

In effect he saying his film may be garbage but at least it was approved to get into schools and pump junk science and fear down the throats of children. Like James Hansen with his Y2K bug and 1998 the hottest year claim who said the data was less important than the political message.

And we know the left has infested the entire education system as these extremist minority groups have done with automobiles (versus public transport), public health (smoking, what we eat etc) and our energy industry and our industry with their bans on chemicals etc (ban Chinese toys which if you lick for 20 years non-stop you might get a blister on your tongue from a chemical in the paint!).

So Gore side-steps his films lack of integrity which as he explains vividly in the film was advised by his scientific mates and "experts in the field" (Wow what a great bunch of scientists they must be to make so many schoolboy errors!) and gets to the money shot. It was approved to spread the fear around (like socialism spreads the wealth around presumably). Adults ramming sh*t down other adults children's throats.

Whatta man!!

[*RSJ: The video is a bit dated for us newsies. It's a two minute snippet of a press conference last October containing the part where Phelim McAleer gets his mike cut off by Gore's people. It got a fair amount of play on Fox News.*]

Posted by John, Channel Isles | February 11, 2010 4:50 AM

John, Channel Isles wrote:

1002270651

Steve McIntyre of Climateaudit fame has submitted evidence to the British Parliamentary Enquiry. He writes:

"CRU has been extremely influential in IPCC reconstructions through: coauthorship, the use of CRU chronologies, peer review and IPCC participation. To my knowledge, there are no 1000-year reconstructions which are truly "independent" of CRU influence. In my opinion, CRU has manipulated and/or withheld data with an effect on the research record. The manipulation includes (but is not limited to) arbitrary adjustment ("bodging"), cherry picking and deletion of adverse data. The problem is deeply rooted in the sense that some forms of data manipulation and withholding are so embedded that the practitioners and peer reviewers in the specialty seem either to no longer notice or are unoffended by the practices."

[*RSJ: McIntyre continues:*

> [Specialists have fiercely resisted efforts by outside statisticians questioning these practices - the resistance being evident in the Climategate letters. These letters are rich in detail of individual incidents. My submission today will not comment on these individual incidents (some of which I've commented on already at Climate Audit), but to try to place the incidents into context and show why they matter to the research record. I will not comment in this submission on CRUTEM issues only for space reasons.
>
> [**Introduction**
>
> [2. Together with Ross McKitrick, I have published several peer-reviewed articles on 1000-year reconstructions and reconstructions, made invited presentations to a panel of the U.S. National Academy of Sciences, to a subcommittee of the U.S. House Energy and Commerce Committee and a Union Session of the American Geophysical Union and have in-depth personal knowledge of CRU proxy reconstructions. I was a reviewer of the IPCC 2007 Assessment Report. I am the "editor" of a prominent climate blog, www.climateaudit.org, which analyzes proxy reconstructions. I am discussed in many Climategate Letters.

[*McIntyre can be rightfully proud of his work and his credentials. He is certainly qualified to speak on this subject. He is not a peer but a superior. But what end was served by his work? IPCC addressed it in its Fourth Assessment Report, only to retain the Hockey Stick, now obfuscated in its spaghetti graph, AR4 Figure 6.10b, p. 467. Referencing McIntyre and McKitrick (2003), it said their work on the PCA analysis "may have some theoretical foundation", but dismissed it in the end, saying "that the impact on the amplitude of the final reconstruction is very small (~0.05°C …)". AR4, ¶6.6.1.1, p. 466.*

[*What has spurred the cloistered community to respond is the reaction not by their peers and not by their journals, but by the public to what has been made public: the "Climategate letters." The Met Office has just issued a proposal to the World Meteorological Society to repair the database CRU mangled. This is what the media labels a "call for a do over". However, the Met Office proposal is uncritical, beyond what might be read into its mentioning that the database records "form part of the evidence base that led the IPCC Fourth Assessment Report to conclude that 'warming of the climate system is unequivocal'." It adds, "It is important to emphasize that we do not anticipate any substantial changes in the resulting global and continental-scale multi-decadal trends. This effort will ensure that the datasets are completely robust and that all methods are transparent."*

[*With that policy, I, too, wouldn't expect any substantial changes.*

[*And here's a timely press release from the WMO.*

http://www.wmo.int/pages/mediacentre/press_releases/pr_876_en.html

It opens as follows:

> [Antalya, 22 February 2010 (WMO) – Climate change challenge is indeed real and every social, economic and environmental sector is critically susceptible to climate variability and change. Some 150 experts from all over the world participating in the Fifteenth Session of the Commission for Climatology [CCl] of the World Meteorological Organization (WMO) are discussing an action plan for providing improved climate services to the global community, which includes the establishment of Open Panel of Experts that will focus on thematic areas including climate data management, global and regional climate monitoring and assessment, climate products and services and climate information for adaptation and risk management.

[*Is WMO referring to the challenge of accepting AGW as valid, or the challenge of global warming to mankind? Want to guess?*

[*These authorities are responding not to a rare criticism that passed what they consider second rate peer review, but to non-peer outrage over fabrication, mishandling, and concealment of data in the public trust; data tuned to create the desired result; arrogant and abusive use of the peer review process; publishing under self-review instead of peer review; errors and exaggerations in claims; an inexplicable failure to predict the most recent climate trend established over the last decade to decade and a half; and models used for public policy that have not been validated. The AGW community continues to use peer review to suppress the scientific virtue of skepticism, and to promote a dogma born of academia and government laboratories. Material created with public funds, and published in peer review journals, is for sale to the public instead of being made freely available. It is a process designed to evade public criticism while supping at the public trough. The Met Office and WMO seem intent on giving the appearance of fixing the database while otherwise staying the course on the unscientific practices of the failed AGW conjecture.*

[*As bad as the arrogance and the abuse of the public trust over the database might have been, the quality of the AGW model as science is far worse. Science imposes no methodology, but within the methodology IPCC elected, it has committed a raft of scientific error. Science recognizes predictive power, and at that AGW is a failed climate model. It appears to be failing in the public eye for a well-warranted loss of confidence. Separately, the practitioners deserve to be punished for failure to adhere to the higher prerequisites and duties of science.*

[*When the Met Office and WMO defend what has been done, in particular, when they defend AGW, they are participating in a cover-up. The practice is in the finest traditions of police review boards run by police departments, and legislative ethics committees comprised of legislators. The whole idea behind peer review is to promote skepticism by an independent body of experts, all in the arrogant presumption that more knowledgeable people do not exist. Buffing the database while allowing this bad science to run its course causes public distrust in science, the objective branch of knowledge. Scientists, whether in the operating agencies or elsewhere, must come forward to polish not the data and not the image, but the practice, the scientific method.*]

That pretty much nails it down, and as is McIntyre's metronomic thoroughness it'll be hard, nae impossible, for the now bent (see

below) Public Enquiry to break him down.

http://www.publications.parliament.uk/pa/cm200910/cmselect/cmsctech/memo/climatedata/uc3202.htm

Meanwhile James Delingpole at the Telegraph newspaper is doing a sterling job of putting the bent British public enquiry to the sword. Apparently at least 2 of the Enquiry members are anything but 'neutral' and it's been found to be bent (or lying) before it even begins.

James writes, "… the official cover-up continues. You wonder, if Sir Muir really is that determined to keep his inquiry totally unbiased, independent, above-board and scrupulously neutral why he just doesn't go the whole hog and appoint Al Gore, James Hansen and Rajendra Pachauri. I doubt the conclusions they'd reach would be any different."

http://blogs.telegraph.co.uk/news/jamesdelingpole/100025934/climategate-the-official-cover-up-continues/

[*RSJ: John provides a duplicate link here. He might have intended this first link to be the following:*

http://blogs.telegraph.co.uk/news/jamesdelingpole/100027665/welcome-to-the-new-world-order/

]

And, "Climategate: the official cover-up continues"

http://blogs.telegraph.co.uk/news/jamesdelingpole/100025934/climategate-the-official-cover-up-continues/

And to finish on a funny note, though I thought about linking to Donald Trump coming out of the closet and saying AGW was rubbish, Delingpole covers Lord Monckton's letter to Kevin Rudd, the shrill empty better known as the Australian Prime Minister.

Delingpole subtitles Monckton's letter with; "On the conspiracy theory that the AGW apparatus is really about creating world government; On the economic illiteracy of ocean-going knobs like Lord Stern; On the crime against humanity that are biofuels; On the 114 Aussie governmental junketeers who flew to Copenhagen" etc.

http://blogs.telegraph.co.uk/news/jamesdelingpole/100021272/if-any-of-your-idiot-friends-still-believe-in-agw-make-them-read-this-letter/

[*RSJ: The last article concedes that CO2 could cause a measurable increase in global warming. It urges that the temperature would rise only 0.02ºC doing business as usual for the period of 2010-2020. This is nonsense. The computation being made is that the temperature rise is 5.7*ln(C/C0), where C is the concentration of CO2 and C0 = 388 ppm. This formula says that the climate sensitivity, the temperature increase for a doubling of CO2, is 4ºC. This is the IPCC result. AR4, SPM, p. 12. It is wrong, a pure fiction, and it should be given no credence by creeping up on the number, big chunk of the World's GDP by big chunk.*

[*Science Error 1: Radiative forcing does not follow the logarithmic relation proclaimed by IPCC. Instead, radiative forcing is a decaying exponential with increasing C. The absorption of radiation by a gas approaches a constant – it saturates. IPCC's model makes the absorption increase to infinity, or at least to have no saturation effect operating in the modern era. IPCC's model contradicts the most elementary principles of physics, which happen to be embodied in this case in the Beer-Lambert Law. IPCC never mentions the Beer-Lambert Law nor recognizes its existence. IPCC has the difficult task of determining where the climate is on the saturation curve. Instead, it takes the easy route, assuming away the curve.*

[*Science Error 2: Earth's climate has a regulating mechanism, the Bond albedo. That is the total Earth reflection, exclusively ice and snow in the cold state, and 75% clouds in the warm state. Warming from any cause in a warm state adds water vapor. And then, for a given solar output, where the atmosphere has a surplus of cloud condensation nuclei (CCN), added water vapor increases cloud cover. IPCC does not model the dynamic albedo effect, and its radiative forcing model is ill-suited to the task. The dominant feedback in the whole of Earth's response to the Sun is albedo, as shown by the most elementary of calculation, and it is negative. It swamps all other feedbacks. It is omitted by IPCC and its modeling with a constant Sun and parameterized, constant cloud cover. Albedo causes the warm state climate sensitivity to be reduced by a factor of 4 (best estimate today) from what IPCC calculates, and it could be as large a factor as 10 yet be undetectable within the state of the art in albedo measurements.*

[*These critics are just playing on the fringe of the problem. It's not bad data and it's not bad breath. It's bad science.*]

Posted by John, Channel Isles | February 27, 2010 6:51 AM

John, Channel Isles wrote:

1003050133

Hi Dr G,

I'm enjoying global warming in the Maldives at the moment. That's the atolls the Gov't are raking in Western taxpayers money for claiming the islands are under attack from sea level rise (the notches in the beeches and the worlds leading sea level expert says the reality is the exact opposite).

[*RSJ: Sea level was rising. Did it stop over the last decade, or even reverse? This is scientifically interesting. However, that rise was not caused by CO2 emissions, real or manmade. That, too, is scientifically interesting – to debunk.*]

In your last response you say, "Radiative forcing does not follow the logarithmic relation proclaimed by IPCC. Instead, radiative forcing is a decaying exponential with increasing C. The absorption of radiation by a gas approaches a constant – it saturates."

Wouldn't that have been a brutally simple scientific case to have made to the British public enquiry? Get that little saturated gem submitted and accepted by the 'investigation' and it would have run amuck with the CRU global computer predictions and their slop bucket science right up to the master of slovenliness, the UN's IPCC.

I agree with all your comments about this whole sorry matter. And it is a matter of politics, not a matter of science, which is a sideshow to this socialist Ponzi scheme to grab more wealth/income and liberty from citizens' lives.

Christopher Booker in the Telegraph predicts "A Perfect Storm is brewing for the IPCC". In his article he states piece by piece none of the climatic effects on the IPCC's scaremongering 2007 Report are valid.

http://www.telegraph.co.uk/comment/columnists/christopherbooker/7332803/A-perfect-storm-is-brewing-for-the-IPCC.html

[*RSJ: Your question and your citation are closely linked. IPCC's Reports can be divided in two: modeling climate change, and assessing its consequences -- climatology and ecology. IPCC's ecology deserves no respect as science. It is the part of the story that Pachauri and the peer-review journals have used as a lever to pry money out of the system. It is a scare tactic. They have felt obliged to crank up the gain, release yet another horror story to keep the issue in the media. The Himalaya glacier, coastal flooding, starvation, extinction of species, African crop failure, spread of disease, and so on are extrapolations from the scantiest of evidence, if any at all, designed to appeal to emotions. IPCC's excesses in ecology are bringing down its own movement.*

[*IPCC's climatology has real scientific roots, some of which is published in its reports and its references. IPCC has assembled this work into the AGW story, once upon a time a conjecture, the weakest of scientific models, but now wholly discredited and invalidated. The story doesn't have the carbon cycle right, nor the hydrological cycle. It violates modeling theory by adding responses that aren't additive. It zeros out natural climate processes that were on-going, and then attributes subsequent processes to man. It models the surface ocean as being in equilibrium, which is deserving of ridicule. It omits the largest negative feedback in the climate system. The list goes on, and it includes the fact that gas absorption saturates. Choose your favorite scientific error. The media don't engage any of them.*

[*I endorse Booker's characterization of this story as "the greatest perversion of the principles of true science the world has ever seen".*

[*A third and transcending branch of this story is the personal scandal. It includes breaches of ethics, arrogance, abuse of the academic peer-review process, secrecy, mishandling and altering of data held in trust, abuse of the scientific method, and self-dealing. These characters abused the public trust given to scientists, and have disgraced science.*]

Posted by John, Channel Isles | March 5, 2010 1:33 AM

John, Channel Isles wrote:

1003060439

Far as I know there's little evidence sea levels are rising Dr G.

The IPCC claim global mean sea level has risen only about 6 inches in the last 100 years (based on their tidal gauge data). I think like their global mean average surface temperature and finding the statisticians love of the 'average man with 2.4 children' it's another impossible average to ever find or argue (i.e., is total bollocks)

All the following areas of land claimed to be under threat of sea level rise are fallacious as claimed by IPCC, Al Gore and Lord Stern;

Maldives - sea levels declining not rising. Nils-Axel Morner, a Swedish sea level expert says sea levels are declining.

http://wattsupwiththat.com/2009/03/19/despite-popular-opinion-and-calls-to-action-the-maldives-is-not-being-overrun-by-sea-level-rise/

Pacific Islands, Tuvalu and Fiji, claim sea levels are declining not rising.

http://www.telegraph.co.uk/news/worldnews/australiaandthepacific/tuvalu/1347100/Falling-sea-level-upsets-theory-of-global-warming.html

Bangladesh - declining too. No threat, satellite measurements show adding 20 sq. km. per annum (Al Gore f**ks up again!)

http://afp.google.com/article/ALeqM5g-8geW6xzI7lk-UWrFBtq66ybN4A

America - declining. Reading errors due to tidal gauge embedded in compacting sediment (i.e., a sinking gauge!)

http://gsa.confex.com/gsa/2001AM/finalprogram/abstract_27978.htm

Arctic sea level has been falling by a little over 2 mm a year according to Europe's ERS-2 satellite measurements.

http://news.bbc.co.uk/2/hi/science/nature/5076322.stm

Global sea levels actually declining due to lower ocean basins.

http://www.nytimes.com/2008/03/11/science/11obseas.html?_r=1&ref=science

Sea levels have not risen for 3 years according to the University of Colorado from measurements by the JASON satellite.

http://icecap.us/index.php/go/joes-blog/sea_level_has_not_risen_for_three_years/

Baltic Sea declining. Britain declining sea level. And the latest claim of the AGW scumbags, Holland under threat, has also blown up in their faces during the recent Climategate scandal.

Meanwhile it's almost a full time job keeping up with Steve McIntyre's Climateaudit website and the endless stories exposing the latest untruths of the AGW cabal. I don't know if you've signed up to the site but I'm getting about 2 emails a day of new exposés.

Latest one today is Dr. Phil Jones of University of East Anglia CRU 'fame' in a hearing with the House of Commons Science and Technology Committee made the statement his non-compliance with Freedom of Information requests was due to "non-availability for disclosure" of Swedish climate data.

His statement is both false and misleading as all Swedish climate data are available and public domain. Yet another straw to break this cabal's, sorry camel's back.

http://climateaudit.org/2010/03/05/phil-jones-called-out-by-swedes-on-data-availability/#more-10525

[*RSJ: McIntyre (or is he quoting Anthony Watts) continues,*

> [What is also clear is that SMHI [Swedish Meteorological and Hydrological Institute] is reluctant to be connected to data that has undergone "processing" by the East Anglia research unit.

[*Climatologists call this "homogenization", distinct from processing. In homogenization, the investigator alters or merges his data to make the resulting data better match the goals of his model. In science, as distinct from climatology, this is called fudging.* Homogenization *and* fudging *are words with a touch of flippancy for an instinctive inclination that should have been corrected in grade school.*

[*IPCC used* homogenization *11 times in its two most recent Reports, but not once critically.*

[*Thanks for the research and links. I am a frequent visitor to ClimateAudit and WUWT, but not a subscriber to any email.*

[*For a technical article on tide gauges and measuring sea level with a nice schematic, see this authoritative link:*

http://sealevel.colorado.edu/tidegauges.php

[*It includes this comment:*

> [Surveys of the tide gauge site are performed regularly to account for any settling of the site. Tide gauges may also move vertically with the region as a result of post-glacial rebound, tectonic uplift or crustal subsidence. This greatly complicates the problem of determining global sea level change from tide gauge data. Differences in global sea level estimates from **tide gauge data usually reflect the investigator's approach** in considering these vertical crustal movements. Bold added.

[*So if the sea level rise is in an IPCC/CRU approved peer-reviewed journal, or if the investigator mentions how anthropogenic CO2 is affecting the climate, you have an indication of the investigator's approach.*

[*Sea level is but another weak proxy for global temperature, better than tree rings but worse than ice cores. It is important to AGW for its hysterical value. IPCC relies on hysteria because its models don't work and can't work.*

[*Is IPCC slowly sinking due to subsidence, or is it going out with the tide?*

[*Whatever sea level is doing, and whatever links it might have to global temperature, don't forget that man is not a cause.*]

Posted by John, Channel Isles | March 6, 2010 4:39 AM

John, Channel Isles wrote:

1003091410

Yes you mention the importance to AGW of hysteria. The socialist blood sucking vampire squid has reached its tentacles into every climate scare story in the book. From sea level rise to hurricanes, drought to food poverty, deforestation to less polar bears, cooking the planet to and shifting our energy from the efficient, productive, able maximum bang-per-buck of hydrocarbons to the inefficient, dumb, incapable total bollocks of growing your own bio-fuels, solar, wind and uber-expensive nuclear.

The socialist squid has gone for the ultimate power grab, inking the water with every sob story, every emotional string it could pull, thrown every straw man in the ring, and it looks like still failed miserably despite 10 years of constant Gov't and quango propaganda.

The FT reports today the shrill green empty, Ms Connie Hedegaard, European commissioner for climate change, revealed negotiations were "not progressing fast enough" for a treaty to be signed this year (i.e., Mexico in December). She said, "To get every detail set in the next 9 months looks very difficult. Europe would love that to happen, and I would love that to happen ... but my feeling is that it is going to be very difficult."

First off this Euro-socialist is using the Royal "we" when she says "Europe would love". So many European countries didn't want to join

this leftie climate/energy madness that the EU's attempt to forge a Euro deal within its own borders was a total shambles of non-agreements and exclusions. Secondly if Europe was a shambles, Copenhagen was a disaster, what gives this batty bitch any good reason to think Mexico will come up a winner?!!

The FT article claims she also defended climate scientists (i.e., Gov't funded cronies), saying the handful of flaws in the 2007 Report by the UN's IPCC and the e-mails in which scientists talked of concealing data did not affect the large body of scientific evidence amassed over decades.

[*RSJ: But she's right about that! The emails didn't lay a glove on the science. The scientific errors in the last two IPCC reports could be case studies for university semester courses in climatology and the forensics of science.*]

Tut tut, typical politician, months if not years behind every information curve! This spineless socialist squid has been hooked from the water and its tentacles are now being surgically sliced up into edible pieces by Sushi Chefs (real scientists) around the world.

http://www.ft.com/cms/s/0/d4fe86d0-2ace-11df-886b-00144feabdc0.html

As for Mexico in December we should see this week the world's stock markets turn down into the biggest downward wave in our lifetime. The infamous "W" double dip has arrived which will proceed another hit to GDP leading us into a full blown Depression 2012-2014 an order of magnitude worse than the 1929-1934 one. Mexico is a non-event now let alone in 9 months time when it'll be a distant socialist memory of their washed up masterplan to run society. AGW RIP? Stick socialism wearing green masks in the toilet with it too while we're at it.

[*RSJ: We have two overlapping classes of politicians. The plain ignorant, and those in office exclusively to perpetuate their office. Come to think of it, the former may be a proper subset of the latter. Regardless, do you expect politicians who are incapable of understand some of the simple errors in the AGW model, like albedo missing or the ocean surface layer stagnant, to be able to understand macroeconomics and the stock markets?*

[*Daily I am reminded of the nonsense that passes for debate from basic misunderstandings of the realities of what has happened in the major economic events, e.g., 1929-1946, 1978-1980, 2007 to 2010+. The problem today is analyzed to the point where blame is assigned to greed on Wall Street, evil corporations (redundant), or the opposition party, and once there, having obviously achieved truth, the analysis has born fruit and we are ready for legislation.*

[*In 2007, we had a ratings bubble burst, not a housing bubble. Senators on the take to give the rating agencies free reign are now retiring with family sized fortunes. We haven't fixed the ratings problem, so present value, financial instruments, and corporate wealth can't be assessed. We had US regulations that lenders had to make 10% bad loans. Those laws are still on the books, while deregulation is considered the cause to be fixed. The US is bailing out banks for book losses, and the banks are trading, not banking. They are using taxpayer money to buy equities, inflating the markets. Officially we have no inflation, while inflation is raging. Look at the gold price of NYSE – it's going down. Last quarter US GDP was stupendous, but not so hot if corrected for inflation. Politicians on the right complain about the debt burden on our children, playing into the hands of those on the left who plan on recovery wiping out their new debt. Meanwhile, if Bernanke fails to make good his threat not to let the US recover, the velocity of money will come to life, the economists' measure of inflation, CPI, will climb, interest rates will soar, bond prices will fall, and the US will no longer be able to service its debt. All this might happen long before our children know anything about it. Among politicians, only the Communist Chinese recognize what's going on. Is that ironic or what? The Fed is monetizing a large percentage of US new borrowing, holding down interest rates, and repeating its catastrophic error of the early '70s. It is force-feeding the inflation demon. Government appetite is insatiable. The leaders have thrown the treasury doors wide open to pass out goodies to reward constituencies, and thrown the borders open to enlarge them. Tax rates are going up while tax revenues and business activity are going down.*

[*The Double Dip is being held off for want of recovery. We're on a cusp. On one side is another big round of layoffs as the cramping of growth spends its merry way, going green, promising Cap & Trade, nationalizing the last health care system that works and happens to be profitable, wrecking corporations, and punishing with tax rates. On the other side is recovery, hyperinflation, failure of US treasuries, bankruptcy of the Fed, and currency collapse.*

[*The AGW fraud sort of pales in significance.*

[*Knowledge and honesty are finite; ignorance and deceit are infinite. So what are the odds of heading in the right direction?*]

Posted by John, Channel Isles | March 9, 2010 2:10 PM

John, Channel Isles wrote:

1003102301

Mixing AGW with politics and economics the Telegraph newspapers James Delingpole reveals the Obama administration is actively attacking and covering up research blowing the lid on the unremitting failure that is green jobs and green energy.

Two studies, in Spain and Denmark, expose the myth that green jobs are 'new' or beneficial, and in fact for every 1 created, destroy over 2 jobs in the real economy.

http://blogs.telegraph.co.uk/news/jamesdelingpole/100028631/what-dave-and-his-chum-barack-dont-want-you-to-know-about-green-jobs-and-green-energy/

[*RSJ: Delingpole cites Shannon Love for the following:*

> [There exists no alternative energy source, no combination of alternative energy sources, and no system of combinations of alternative energy sources that can fully replace a single, coal fired electric plant built with 1930s era technology.

[*Love's article was titled, "Why Alternative Power Is and Will Remain Useless".*

[*Politicians and the public can't be bothered by the engineering that shows the ignorance in using more energy to produce energy than is contained in the output. Or the notion of breakeven points on the costs of these projects.*

[*Here's a simpler rule for the pols and the public. If the project made economic and technical sense, someone in the private sector would already be doing it. The fact that the government is doing something, or preventing something being done privately, is strong evidence that the government action is technically or economically unsound. The people must not be allowed to make decisions for themselves. Laws must be written.*]

Delingpole's story sources the exposé by Christopher Horner of Pajamas Media. Freedom of Information requests reveal the US Dept. of Energy turned to George Soros and to wind industry lobbyists to help cover up two economic studies pointing to the failure of European wind energy programs and indeed disgustingly attack the sources of those studies (inconvenient truths).

http://pajamasmedia.com/blog/breaking-anti-lobbyist-obama-administration-recruited-left-wing-lobbyists-to-sell-bogus-green-jobs/?singlepage=true

And here for fun, is a wind turbine spinning out of control.

http://www.simontreasure.name/about-orkney/politics/orkney-winds/

[*RSJ: Interesting 40 second video. Who did this deed? I would assume someone murdered the beast, else why would the camera be all set up to record it?*]

Regards politicians on climate and economics understanding anything the answer is a big 'NO' in capitals, Dr G. I expect nothing less of our politicians than to take the easiest path, the most politically expedient decision, the one that benefits mostly their campaign funders and surround themselves with cronies, Yes-Men and spivs of all types to protect/weasel/worm their incompetent at best, if not most probable corrupt decisions. Isn't that politics, indeed Gov't, in a nutshell for centuries?

So it our jobs to look after ourselves. The 50% of most Western democracies that do not vote are probably the sanest amongst us. The rest are just wishful thinkers whistling in the wind and bordering on insane to think Gov't, our representatives, will ever work.

You mention Congress lining its pockets and the Fed Credit Rating Agencies and greed on Wall Street failing. Let's nail down specifically what is failing. Socialism.

[*RSJ: Socialism is failing? I think not. It is being quite successful at what it is intended to do – vest power in a ruling clique. We're witnessing socialism being socialism. It gives the people slogans and tokens for the benefits of the rulers. It's the autoimmune disease of democracies. It's the propaganda of totalitarian regimes, giving just enough to the people to prevent another uprising. Historically, all socialist enterprises have collapsed. They consume wealth, and produce none. Obama is the latest experimenter, doomed to do no more than create great pain at home and throughout the world.*]

Housing is failing because it was fueled by cheap debt (low interest rate credit/debt) pumped out by the Fed, itself a socialist institution I think set up by the left under Franklin D. Roosevelt. The Fed primed the pumps with cheap fuel for the housing boom in the mid-80's under Alan Greenspan, who like Bernanke today, still won't admit there is either a housing bubble or that they had anything whatsoever to do with the subsequent miserable failure of their policies.

[*RSJ: The world economic crisis occurred because of the failure of the subprime mortgage market. Bonds made of these subprimes, leveraged over 20 times in crazy derivatives, failed to live up to their AAA and AA ratings purchased by lenders from the three rating agencies at a profit to the agencies. Securitization failed. Prime loans didn't fail; the housing market didn't fail -- initially. MBA products failed. When these instruments based on subprimes started defaulting at several percent per year instead of 0.1% over 20 years (the actual number is a secret denied even to Congress), the agencies simply withdrew the ratings. Now no one can trust ratings. The system hasn't been fixed. Housing is now in major decline, but as a consequence of the widespread economic collapse.*]

The Fed priming was added to by yet more socialist created institutions, Fannie Mae and Freddie Mac, both now twice each bankrupt underwriting mortgages to the poor at money rates to low to cover risk. And let's not leave out the Democrat run banks, such as Goldman Sachs (the original vampire squid with tentacles all through Washington, the Fed itself and regulatory bodies) and other leftie run Wall Street banks.

[*RSJ: You seem surprised, but your being hoisted not by petards but by definitions. Socialism is government ownership of stuff, and what the government controls it owns. The correlation is roughly 100%. Growth of government IS growth of socialism.*

[*But then the difficult concept for many self-styled libertarians is that capitalism can't work in zero government. Anarchy, including laissez-faire, is neither a form of capitalism nor a parent of it. Anarchy begets feudalism, tribalism, slave trading, piracy, organized religion, and barter. Two goats for your daughter. Capitalism walks a fine line along a treacherous politico-economic mountain ridge, death by government on the left, death by anarchy and zealots on the right. Slavery or serfdom either way down.*]

They were aided and abetted by the FDIC, another leftie loon quango, who is supposed to make bank deposits 'safe' but does the exact opposite of what it says on the tin, like regulators, as does every political institution. The FDIC actually encourages bad lending

giving banks and consumers the futile belief their deposits and lending is guaranteed, that risk taking can be encouraged without bounds because it's all 'safe'.

The FDIC is also bankrupt. From memory I think they 'insure' $Trillions of deposits but are down to about $90m in the bank. And being socialist it is now ratcheting healthy banks fees up, by triple, to bail out failing banks. Spread the wealth around, or nobble the sound to prop up the failures and spread the crap around so that everything is an equal pile of crap (socialism in a nutshell).

[*RSJ: The concept being exercised is too-big-to-fail. It is as anti-capitalist as Obama's anti-corporation rhetoric. It is anti-wealth creation, anti-growth, and in the longer term, anti-wealth. It's the risk in capital investment that causes entrepreneurs to make sensible decisions to create and accumulate wealth. Too-big-to-fail and redistributionism work together to kill wealth creation.*]

And let's not leave out the other part of the economy going bankrupt. Big Gov't (debt) in Washington and Big Gov't (debt) with over half US States on the verge of bankruptcy. Municipal Bonds are toast soon and with it the Feds printing presses cranked to 'Max' to bail them out all too soon.

So let's be specific with what is going bankrupt. Leftie institutions following leftie policies running foot loose and fancy free with too much cheap money.

So let's be specific it is the left going bankrupt during this recession, about to turn into a Depression the like of which we've never seen before. No country has ever spent their way to success, indebted their way to success, printed their way to success. The Fed fails on ALL 3 counts (economic policies).

[*RSJ: The Great Depression of 1929 lasted until 1946. It ended while about 7 million people were returned to the labor force! And while the defense industry was mothballed. WWII didn't end the Depression. It put everyone to work for sure, but shortages were the rule of life, including food stuffs and housing. What brought about recovery was a massive cutback in government spending accompanied by an equally massive cutback in taxes. The world returned from wealth consumption to wealth creation.*]

What is the Fed's primary responsibilities? Ensure employment (unemployment now 10%) and financial stability (all top 8 US banks went to the wall and required bailouts). The Fed fails miserably on all 5 counts, on policies followed and on economic aims for its rotten institution.

[*RSJ: Full-employment is a law in the US. It is pure Keynesian nonsense, but the government regularly invokes it. Pump priming doesn't work. Spending stimulates just like a narcotic.*]

The Fed is yet another socialist failure following, as you say, shambolic already failed left wing policies from the 70s (print money to prop up crap like zombie banks and zombie Gov'ts) and indeed the 1929 Depression under F.D. Roosevelt who crushed the US economy with his 'New Deal' of State controlled economy.

So sit back, Dr G, and watch the Depression about to hit. Watch capitalism in its most destructive (forest fire) phase and equally creative phase (allowing room for new growth) lay waste to all the socialist institutions as they collapse, implode, fail and crumble.

And what we have coming is worse than 1929. Where an aid to the FDR Gov't saw 3 of his rich lose all their wealth, 2 shot themselves, 1 jumped from a building. He said he thought he was smart withdrawing his money in $1,000 notes from his bank before the banking collapse but nobody would cash it, nobody trusted the currency! Think 50% plus unemployment. Total meltdown of banks and financial institutions and all asset classes/property with double, maybe even triple digit inflation. And as he recounted, people who no longer trusted their bank, their currency, their Govt or their country. Total depression.

The 40 year (± 1-3yrs) supercycles of Depressions, and deflationary bear markets that accompany them caused just under 50% of Gov'ts worldwide to default on their debts in 1929 and 1970's periods. This 2007-2015 Depression we have coming down the pipe this year should see sovereign defaults boom and rise above 50% for the first time ever in the next few years.

Good. Gov't is a sham, a socialist Ponzi scheme, anyway.

[*RSJ: Cycles are economic nonsense. It's like the burden–on–our–children–and–grandchildren cliché. Obama and the Dems are actually banking on a natural, cyclic recovery while they borrow, spend and print money, forestalling recovery and inflating the money supply. To them the debt will never come due.*

[*Inflation raises market interest rates. As market interest rates rise, the breakeven point comes sooner. Risk increases, and the planning horizon foreshortens. To too-big-to-fail and redistributionism, stir in inflation for a sure kill to prosperity.*

[*Once a recovery starts, which Bernanke is committed to prevent, inflation already well underway will move into the CPI, market interest rates will soar, creating a double whammy with mounting debt, and the US will be quite unable to service its debt. The end is conceivable long before those children are conceived.*]

Posted by John, Channel Isles | March 10, 2010 11:01 PM

John, Channel Isles wrote:

1003281811

My last post predicted an imminent stock market collapse which hasn't happened... yet!! We've seen a highly unusual unbroken run

of 13 days ticking up in the Dow, S&P and NASDAQ which has only happened twice in the past 30 years. These previous unbroken runs were followed by approx 30% stock market collapses.

This week should see 2010 crash begin as the markets looked truly exhausted and over-bought last week. 2010's stock market crash will see a 55% decline, the largest we'll see in our lifetimes, to below the March 2009 previous rock bottom which wiped $22 trillion off the global stock indexes value from 2007 highs.

[*RSJ: At this point, I'd want to look to price-to-earnings ratio, and that should be frighteningly bad – say, approaching infinity. That should be enough to forecast a collapse.*]

You mention inflationary pressures but I'm not sure if it isn't deflation that is the much greater evil and what will mark this upcoming deflationary Depression. It's deflation that we are seeing, not only in the symptom of declining prices (housing market etc) but also bankruptcies. Both declining asset prices and bankruptcies are symptoms of deflation (i.e. previous inflated credit bubbles deflating).

[*RSJ: No, it's inflation. Going back to Keynes, lefties abbreviated inflation from "an increase of the money supply (inflating) that causes a general increase in prices" to "a general increase in prices". This useless definition makes inflation no longer a monetary term. That meant that as long as the velocity of money was low, which keeps prices from rising whatever the stock of money, then governments could spend willy-nilly. That's what's going on now, political economists telling their clients (politicians) that they can go ahead and spend as long as the CPI doesn't rise.*

[*Market interest rates would rise if we had a little recovery. And Bernanke has announced that he's standing by ready to kill off any such horror. Meanwhile, the market for our treasuries is waning, and interest rates to the federal government are starting up based on real economic pressures: excessive expansion of the money supply.*

[*We are already in Depression 2.0. We've had longer low unemployment than in any other recession. The US economy is not absorbing the next big hit as the new health care tax swings into effect. Watch for the next wave of US unemployment, and as the US goes, so goes the World. Watch for a big depression multiplier with Cap & Trade, GDP draining legislation to fix the Sun. See* **SGW***, the new entry in the* ***Journal****.*

[*Double dip unemployment, shrinking private economy, inflation – latent in CPI but real otherwise. This won't be like the Great Depression, but the government will be equally unable to reverse it. The Dow may collapse, but that's not a prerequisite to global economic failure. The federal government can continue to pump up stocks by opening the door of the treasury to banks and nationalized corporations so they can buy equities on behalf of the government. The route to collapse is the imminent inability of the US to service its debt. This is getting the double whammy of rising debt and rising interest rates. The end is near.*

[*It took exhausted retrenching from a war time economy for the US and the World to recover from 1929. What might the mechanism be for recovery from the Obama Depression?*]

A Reuters article quoted William Snyder of turnaround firm CRG Partners on US bankruptcies, "Last year [2009] was like a tsunami, but this next phase will be more like a rising tide; consistent and steady." That 2009 deflationary tsunami included CIT banking group filing for bankruptcy with $71 billion in assets, General Motors with $91 bn in assets, Washington Mutual with $328 bn in assets and Lehman's with $691 bn in assets.

[*RSJ: Wouldn't those figures be gross assets (the assets column), and not net to include debt (sitting in the debt column)? I am confident that these companies failed when their paper assets collapsed with the bursting of the rating bubble. They would have simply lost a fortune if not for their debt.*]

The expansion of our credit (debt) fueled economies mirrors the 1920's period where credit grew to a whopping 270% of US GDP. Today our credit mountains stand at over 300% of GDP which is why this 2007-2015 depression will be even worse in its social, commercial and economic carnage than 1929's.

[*RSJ: In each case, didn't the ratio explode because the denominator, GDP, collapsed?*]

The deflation of the 1929 credit bubble (300% of GDP down to 100% of GDP by 1945) is the cause of symptoms such as the huge business and personal bankruptcies, stock market collapse, commodity and property price crashes.

Indeed the US Gov't and Feds attempts at reflating credit bubbles have been largely follies and futile. If you look at the Oct 2007 stock market collapse to the March 2009 lows the Fed's and US Gov't's lame attempts to pump in of liquidity throughout 2008 with various rescue and stimulus packages had no effect on that stock market collapse at all or property price deflation for that matter.

[*RSJ: The US government can't face the cause of the 2007 collapse: a bursting of the ratings bubble, a crime by the ratings agencies in which the Democrats were complicit. Lenders were forced to make unsound loans by a law that is still on the books, these loans were bundled and leveraged through MBA-designed derivatives that created a house of cards, and the rating agencies happily sold AA to AAA ratings all along the upward inflation. Meanwhile through Fannie, Freddie, AGI, and others, Congress took bribes to look the other way. And they did. Nothing was or is going to done to mend this massive problem. Financial instruments that should have been rated below investment grade were rated as high as US T-bills. When the rating agencies precipitously withdrew their fraudulent ratings, no one could trust any ratings anywhere. In this next wave, US treasuries are going to drop below AAA.*

[*The US government's TARP compounded the fraud. It just stupidly pumped out cash with no purpose. It was conceived and executed by Paulson and W., two Harvard MBAs who trained to believe that nothing could possibly be wrong with derivatives and securitization.*]

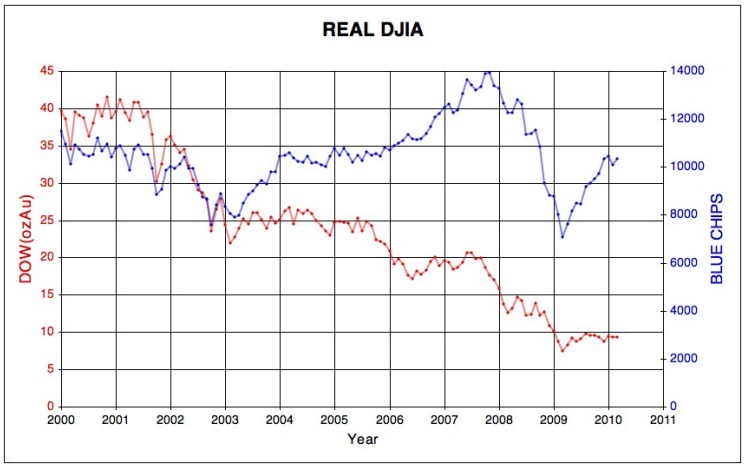
A Gov't economist was quoted as saying "Deflation is No. 58 on my list of worries". That just about sums up the bunch of idiots that

pass as 'economists' and 'expert advisors' that surround the Gov't and Fed.

The US Gov't and Fed are both impotent. And this fact will be demonstrably proven once again this year as it was during 2008's deflationary carnage. The stock market will collapse very shortly, BEFORE the Fed withdraws stimulus and before the Fed raises interest rates, neither of which have any material effect on the stock market or housing market for that matter.

[*RSJ: I'm sorry, but you can't be serious about deflation. That requires a contraction of the money supply. That's what Pres. Hoover did; exactly the opposite of FDR and Obama.*

[*Check out this chart:*



Stock market not as good as gold
Figure 25

[*The left hand ordinate is the Dow Jones Industrial Average in ounces of gold; the right hand ordinates is the popular DJIA. At any time since 9/11, an investor would have done better in gold than in blue chips. The picture might look better with some earnings folded in, but don't expect the difference to be significant. Gold with no earnings – guaranteed – has done better than the Dow, with gains and losses. Real stock prices have been in a steady decline. What you're seeing is the ugly head of inflation manifest in both gold and in equities.*

[*You can see the effect of the stimulus package, too. Obama caused the gold price of stock just to hold its own for a little while. He took care of the leak in the stock market with more water upstream in the reservoir -- debt.*]

Prices of stocks and houses will continue to deflate and bankruptcies will continue like a relentless water torture throughout this year in a deflationary spiral around the drain.

Another great example of deflation is the previously flush with cash Kansas City school district having to shutter almost half of its schools because it was facing bankruptcy reported in the Associated Press this month.

[*RSJ: Housing prices down, government tax receipts down, everything goes down with the decline in consumer money, whether it's across the board or sector by sector. The economy is collapsing, as is the fate of all Marxist-Socialist systems. We're heading for an official dollar devaluation: e.g., 3 capitalist dollars for 2 Obama dollars.*]

And have you seen how much corporate debt (bank loans) taken out in the pre-2007 boom there is to renew between 2012 and 2014? Something like $2.4 Trillion in 2012 rising to over £4 Trillion in 2014 all to compete with Obama world's record issuance which itself started to run dry (did the Chinese not turn up last week?). "Oh My God!"

[*RSJ: Spot on here. Our irresponsible businesses, run by-and-large by MBAs, and the horrible pressure they put on businesses, exist to extract money for the personal fortunes of CEOs. To them, products and services are perpetual, maintenance-free rivers of cash, and secondary to corporate cash flow. Business life expectancy has been sold off for personal gain. This is the Michael Milken model for business management. It is a fatal virus to capitalism. This is why businesses move off-shore. This is why businesses go bankrupt still holding substantial assets -- they have even more substantial debt.*]

A large chunk of this huge corporate debt due for renewal is property speculation and at least half of these loans are under water in terms of loans to asset ratios. Add to this most other corporate loans were similarly taken out in the 'good times' when everyone was pretty sure the good times would continue for ever and a day and you have a colossal problem with banks being to keen to renew this mountain of risk!

So this will be overwhelmingly a deflationary depression. Inflation won't get a look in amongst the credit bubbles deflating (being sucked dry like prunes). There are few places (asset classes or investments) safe to store our money and don't go looking at Gov't Bonds or Treasuries either!

Posted by John, Channel Isles | March 28, 2010 6:11 PM

John, Channel Isles wrote:

1003281811

It's not P/E ratios that predict stock market collapses (or rises) just as they have no impact on share prices. US Banks are currently 8-12 P/E while Apple is 22. Does this P/E predict an Apple share price collapse?

What drives markets is plain and simple social mood. Positive mood about the future and the economy encourages the investment herd to pile into stocks while negative mood about the future causes the herd to pile out of stock markets into less risky asset classes (right now, the only thing left is cash).

[*RSJ: Cash is the only thing left – unless you are a bank too big to fail (P/E 8-12), eh? Buyers still exist for treasuries with zero yield! Why? There aren't enough to buy the full offering, so the Fed is buying up the remainder instead of letting the price drop, i.e., instead of letting the interest rate rise. So some money is being taken out of the economy for what can be sold, and for the rest, the Fed is monetizing the debt. There was a song circa vaudeville: Yes, We Have No Bananas.*]

We see the same social mood at work in the economy. In the 80's, post Depression everyone was over the negativity and the good old Fed fed this mood with credit (debt) hence the explosion in credit markets. The Fed did not 'sell' credit, they fed a demand. Similarly the US Gov't's and Fed's recent manic efforts to pump 'free' money into the banking system to reflate a deflating economy was utterly futile.

[*RSJ: Investors come in two classes: the rational and the irrational. Your emphasis is on the latter, which is noise in the system. P/E ratios are part of the rational process, for the market as a whole and for individual issues. The social mood you perceive is not the herd, the irrational. It's the sound view that Obama is destroying the market. Only the banks are putting their money in stocks.*]

The consumer and corporate social mood had changed. Nobody wanted more credit, we wanted to pay it off, because we had no confidence the future was bright and we could pay it off. Geitner and the Fed were pushing on a piece of string. Even the banks didn't want to loan out this cheap money given on a silver platter because they also has a pessimistic outlook they'd see their money back.

[*RSJ: Our housing market is in collapse because of the difficulty in getting a mortgage. We have a law that something like 10% of mortgages have to be written to people who can't make the payments. In 2006 one could bundle those bad loans and securitize them as AAA bonds, and leverage them over 20 fold into AAA instruments. So the mortgage company made the loans. That law, called the Anti-Redlining Law, is still on the books, but the securitization racket folded. So who wants to write any mortgages, good or bad? And who wants to write mortgages when prices and equity are falling? This is neither inflation nor deflation. It is socialism absorbing wealth.*

[*Our housing market is blindly looking for a new, mortgage-free equilibrium.]*

Consumers, businesses and banks had wised up.

The US Gov't and Fed were still dumber than mud.

The Oct 2007 stock market high to the March 2009 bottom was riddled with one US Gov't stimulus package after another Fed printing press funny money after another lame Fed attempt dropping interest rates all in the vain attempt to reflate a deflating economy. They had no impact whatsoever.

[*RSJ: Maybe. But the expressed rationale featured the big fix: the "Toxic Asset Relief Program", which was advertised to take care of the instruments that lost real or phony ratings. The money was never spent for that. It couldn't happen because it was too hard to do, and because the Democrat leaders, e.g., Dodd, Obama, were vulnerable to exposure for having been on the take for the phony ratings and the cover-up of the rating agencies. So TARP turned into just a naked bail out, cash for being too big to fail. And then came Obama, who doubled down.*]

The US Gov't and their cronies at the central banks are totally impotent to alter the course of the economy or the consumers and businessmen in it. Indeed look at the Feds actions compared to the market and you see by date the Fed follows on the coat tails of the markets rates.

[*RSJ: Here I'll quibble. They are not impotent; they are incompetent. On 2/2/09 Obama said, "*Then you get the argument this is not a stimulus bill, it's a spending bill. Well, what do you think a stimulus is? That's the whole point. [laughter] That's the whole point. No, seriously, that's the point.*" That's Keynes circa 1930. FDR proved it false in 1937-1942. WWII proved it false. Stimulus was what happened when WWII ended. The problem is the Obama has no world experiences, and no substantive education of record. He is instead an articulate product of Affirmative Action, of birthright sans certificate over accomplishment. He is a fine leader for reviving the Marxist socialism movement, complete with a willing legislative majority comprising Marxists/socialists/Affirmative Actionites/incompetents.*

[*In case its not clear to everyone, a spending bill is anti-stimulus. It is a depressant on multiple fronts: taking money out of the economy, removing discretionary money for new goods and services, depleting consumer money, and inflating the money supply. Now throw in nationalizing goods and services and Cap & Trade, and you have a recipe to eclipse the Great Depression with no relief in sight.]*

Where is the inflation in the economy you mention Dr G ?

[*RSJ: In the graph I showed you. In gold and in the Dow.*]

This is a deflationary depression. It's stamped its boots in the deflationary prices of the housing markets, consumer markets, credit markets, deflating municipal, State and US Gov't incomes (tax revenues). The US and European economies have been sucked dry like prunes and the next deflationary wave is about to hit.

[*RSJ: Just as rising prices do not mean inflation, falling prices do not mean deflation. Our economy is stagnating, braking regardless of the money supply. Business is not expanding for lack of discretionary income and lack of a visible consumer market. Meanwhile Obama is exacerbating both sides of the investment equation (e.g., health care, nationalizing student loans), with promises of much more of the same to come (e.g., Cap & Trade). For dinner tonight, the Obamas are serving the Golden Goose.*

[*The economy is not moving, as measured by the velocity of money. And that's the way Obama's people want it. When the velocity picks up, "official" inflation appears, market interest rates go up, and debt servicing quickly gets out of hand. Obama needs a stagnant economy for his free reign spending and expanding of the Federal government. Stagnation is a door stop that keeps the treasury wide open. It's the perfect storm.*

[*Of course, business expansion was weak before Obama, but for a different reasons: CEOs were liquidating their public trusts for their personal family fortunes, and Republicans were eating it up in the name of efficiency. The CEOs are now anxious to get back to the good times.*]

Between 2012 and 2014 vast sums of loans taken out pre-2007 come up for renewal. And vast new amounts of corporate and Gov't debt needs to be filled to fund its already budgeted future liabilities. There isn't enough credit (debt) to go round. It's estimated, from memory, there's a $2-$4 Trillion shortfall globally (i.e., not enough buyers of this debt).

I fail to see how inflation, included in the CPI figures or not, matters when your house price is falling 30% or as a business your bank refuses to renew your lending. That's deflation to worry about, not inflation surely?!!

And we had news last week the US Gov't's unfunded social programme has passed the point where its declining income dropped below its rising welfare outgoings. That wasn't supposed to happen until 2016!!!

[*RSJ: I couldn't believe the story. Did the reporters get it wrong, as well they do with regularity? Did they confuse the break even point with zero balance in the hypothetical reserve? If the story is factual, how in the world did the economists responsible for Social Security miss the date by 6 years at t-minus-1-year?*]

Municipalities have already reached a similar deflationary point of no return where tax income is declining (deflating) so fast lending is drying up as they're a bad credit risk.

Inflation? I can't see it for all the credit mountains deflating!

[*RSJ: Deflation still requires a contraction of the money supply. Obama is inflating the money supply at unprecedented rates outside the Weimar and banana republics.*]

Posted by John, Channel Isles | March 31, 2010 11:08 AM

John, Channel Isles wrote:

1004051736A

Regards inflation showing up in Gold and the Dow yes it's true Gold and the Dow has risen since 2001. Gold's risen 4 fold since 2001 to the 3rd Dec 2009 high so for 8 years Gold was a good investment, a hedge against inflation (and recession) as the myth goes.

Unfortunately inflation occurred relentlessly between 1933 and 1970, yet Gold (and Silver) remained unchanged. It was the worst hedge against inflation 1930-70 against stocks which would have earned you 20-30 times depending on re-investing dividends.

[*RSJ: You have mixed your facts -- again. A couple of posts back you said "It's not P/E rations that predict stock market collapses". Actually, stock market prices predict P/E ratios. The market crash of 1987 was predictable based on extremely high P/E ratios.*

[*Now you have gold history wrong. The Gold Standard fixed the official price of gold at $20.67 per troy ounce from about 1880 until 1933, the price at which FDR confiscated private holdings and made them illegal. Then he devalued the dollar to make the official price $35 per ounce, which would last until 1971, when Nixon floated the dollar. Congress repealed the limitation on private ownership as of 12/31/74. One would expect prices to be unchanged, and of course it was a hedge against nothing. The price of whatever the government regulates is known precisely -- it is the value that is unknown, e.g., gold, automobiles, bonds, real estate, energy.*]

Gold and Silver soared again in the inflationary 1970-1980 period which restored the myth as inflationary hedges. However 1980 to 2001 inflation continued but Gold and Silver lost some 83% of their value. Stock prices 1970-1980 rose 13 times in terms of Dollars and 45 times in terms of Gold.

[*RSJ: What you witnessed was an auction suddenly opened for gold in which it had to seek its value. However something else was going on. From around 1965 to about 1976, the Fed intervened in the treasury market to hold down interest rates. When the auctions reached the Fed's threshold for the rate of return, it bought up the remaining offering. The Fed was monetizing the debt, i.e., printing money, and sort of setting interest rates, as much as it has the power to do that. Inflation was relatively huge, but suppressed artificially. The Fed*

soon owned around 25% of the national debt, and couldn't maintain the charade as it had to buy more and more of the offerings against the rising tide of inflation. It let go of its end of the rubber band, stopped buying down interest rates, and started dumping its holdings into the auctions, which took a few years.

[*The Fed had created negative real interest rates. One was a fool not to borrow in that environment. People bought unneeded capital equipment, built excess manufacturing capacity, houses, cities in the desert, and even wind farms. When the Fed let go, market interest rates soared in a five or six year period. Higher interest rates meant that CPI shot up over 10% per annum – inflation, always there, became apparent. Market interest rates more than doubled – 22% - 25% -- and portfolio present values plummeted (more of that awkward rational stuff). Carter was scuttled. S&Ls first, then banks, laden with huge debt loads backed by devalued assets, went aground and had to be rescued. Precious metals, looking for a value price since the early 70s, paused, then surged with apparent inflation to a max of $850 per ounce for gold in 1980, then gradually subsided until 2001 when W unleashed his then-massive war time deficit spending. Whatever W did for inflation, Obama is determined to make insignificant.*]

So out of 76 years of inflation, Gold and Silver only rose for 18 of them despite unlimited free money (0% interest) and the Fed creating $1 Trillion of new money base (a 4.4 times multiple in the M1 measure of money supply since 1980).

If in 1933 you knew where annual inflation (and the money supply) was heading for the next 80 years you'd still have no idea where Gold and Silver or stocks were heading. Same goes for P/E ratios. The 'basic physics' models of inflation, money supply and P/E ratios fail to deliver time and again. As does the garbage of Keynes 'stimulus' economics and the Gov't and Fed controlling the money supply, stock markets of interest rates.

According to these 'exogenous-cause' models, historic Gov't and Fed pledges and bailouts must deliver immediate results. Absolute rubbish. The Oct 2007 through to March 2009 indexes collapse was blasted throughout 2008 with stimulus after stimulus all to NO EFFECT. I agree with your "incompetent" tag Dr G but that doesn't take out impotent, it just adds (insult) to injury) to it.

[*RSJ: The US government has plenty of power to remedy the economic crash. It is not doing what needs to be done out of incompetence and power madness.*]

Exogenous events (GDP collapse, war, oil prices, major news stories, Gov'ts and politicians, the Fed, terrorist attacks like 9/11, major climate events like tsunamis etc) do not effect stock market mood and therefore prices. They carry no weight at all.

In fact it is social mood as reflected in the stock market that predicts how we see these events.

"It's the economy stupid" as Clinton left written on his desk for his replacement and as you mentioned for the 'victims' of the Carter administration. Not the economy so much as stock markets which proceed (predict) economic changes. Any administration during a bull market always (100%) gets re-elected. Any administration in a bear market always (100%) gets booted out. The social mood always demands change in bear markets.

[*RSJ: Since 1916, US incumbent presidents lost in 1932 (bear), 1976 (bear), 1980 (bull), and 1992 (bull): 2:2 bull to bear. The party holding the presidency lost in 1920 (bear), 1932 (bear), 1952 (bull), 1960 (bull), 1976 (bear), 1980 (bull), 1992 (bull), 2000 (bear) and 2008 (bear): 4:5. {Begin rev 4/30/10} I used http://www.infoplease.com/ipa/A0781450.html for the presidential elections, and http://seekingalpha.com/article/99902-historical-bull-and-bear-markets-for-the-dow-1900-present for the bull/bear classifications. {End rev 4/30/10} Looks like a simple coin toss to me.*

[*People tend to be long, so they would be inclined to be in a lousy mood in a bear market and a good mood in a bull market. Even if you could decipher whether the people are in a good mood or a bad one, you couldn't determine which was cause and which was effect: mood or market.*

[*The conjecture that mood sets market prices is about as good as manmade CO2 causing the Sun to warm, the physics behind Cap & Trade and 35.5 mpg autos.*]

The 55% collapse in the stock markets this year denotes absolute carnage for the Democrats in November. And it's mood not P/E ratios that will drive this years massive declines as the confidence dries up and pessimism reigns supreme turning even great P/E ratios to dust.

[*RSJ: Right conclusion, wrong reasons. The populace IS like the markets in one regard: irrational on the left and irrational on the right, but that is the noise in the system. In the middle is a small set pretending to be rational, if not instinctive. That middle is the signal in the noise.*

[*Like GDP, stock markets are surging -- in now dollars. Obama is bailing out the markets via their agents, the banks. Meanwhile, Obama needs to keep the economy cold (P/Es high) so that his inflation doesn't register in the CPI, then in market interest rates, and then in debt service. He can probably get away with this through November, but that won't be good enough. Obama has instituted radical left changes to this country and its traditions, nationalizing industries, debasing the currency, embracing enemies and shunning friends, bristling with dishonesty and promising more. All this is bitter medicine, and against the will of a fairly well-informed and angry populace. The mood of the people is bucking now year market prices.*

[*We have two well-done geese on the spit this year: the Democrats and the climatologists, if indeed the latter are not already stuffed in the former.*]

Posted by John, Channel Isles | April 5, 2010 5:36 PM

John channel isles wrote:

1004051607

Dr G,

Why does deflation require a contraction in the money supply?

[*RSJ: Because of definitions. Inflation is an expansion of the money supply that causes a general increase in prices. Deflation then has to be the opposite: a contraction of the money supply that causes a general decrease in prices. Of course, liberal political economists define inflation as an increase in general prices. In that way, they can advocate increasing the money supply without penalty. Then they choose to measure inflation by the CPI, so as long as that doesn't rise, inflation is not occurring. To keep the CPI down, they only need a low velocity of money. It's a recipe for socialism, which is the taking of liberty.*]

Obamaworld and Banana Socialist Republics of the Western World like Britain and Europe are creating money entirely electronically. Meanwhile the Oct 2007 to March 2009 stock market collapse wiped $22 Trillion of the values the exchanges, nearly half that value falls on the US exchanges.

[*RSJ: Obama is creating paper money, good old fiat US dollars. His debt is covered by treasuries. Some of those treasuries are sold on the open market, taking dollars out of general circulation for government use. Some of the treasuries can't be sold without a severe drop in price (rise in interest rate), and the Fed buys those. That purchase expands the money supply.*

[*Markets collapsed in 2007 because the rating agencies withdrew AA and AAA ratings they had issued, replacing them in stages to below investment grade. This destroyed the public trust those agencies held. It destroyed present value calculations which had depended on quality instruments, causing portfolios with rated instruments to be if not worthless, incalculably bad. These were labeled "Toxic Assets". Financial markets were in collapse. Not only were portfolios worthless, but money became unavailable to finance business and business expansion.*

[*These two problems compound. The Federal government and half the states are heading for bankruptcy along with financial institutions, auto manufacturers, insurance firms, the medical sector.*]

Similarly US house prices have lost 30% of their value since their 2006 peak. I'm not sure of the value wiped out there but Obamaworld's funny money printing orgy simply cannot keep up with these deflationary mountains collapsing!

If you believe P/E ratios are "part of the rational process" then presumably you believe the market is a rational process. Nonsense. By all means invest in stocks according to P/E's. You'll underperform in bull markets though it may help you marginally by underperforming declines during bear markets.

[*RSJ: The market has a rational component and an irrational component. If you are picking stocks to stay up with a bull market, you are investing irrationally. It may be fun, but it's pure gambling. If your picking stocks because of their earning potential, discounting for any bear market or taking strategic short positions, your investing rationally. You are participating in capitalism.*]

I'm sure you could find some great P/E ratios amongst US house builders before the 2006 peak in house prices. The rational turned to jelly because like all matters in the Universe, flux and imbalance rules, rationality is only found in pockets and in details, not in 'The Big Mix'.

[*RSJ: You'd be a fool to invest solely on the basis of P/E ratio. You'd also be a fool to invest where the P/E ratio is too high for the fundamentals. If a company is offering a growth product or service that you believe in, and that is not yet reflected in its P/E ratio, sounds like a good buy.*]

As I mentioned a while ago regards billionaire leftie, George Soros, and Lord Turner, the new London FSA Chief, they believe in rationalising the "irrational" and "inefficient" market. They believe Hedge Funds needed their strategies 'approved' by the regulatory authorities, presumably into one harmoganised gray margarine of an investment product. The whole point of capitalism and why it is indestructible (so long as man exists) is it follows many paths like human genetics. The future is wholly unpredictable, so variety, however unconventional and however irrational, covers all bases.

[*RSJ: The countries that killed any capitalism are legion. Obama is taking us there. Capitalism is a by-product of liberty, but requires an enlightened government – a duty to the infrastructure, and preservation not of a laissez-faire market but of a free market for the auction. Obama is enlightened by nothing. Capitalism succeeds because entrepreneurs are successful in predicting the future.*]

If I said 10 years ago Ryanair would be offering tickets London to Frankfurt for £9.99 (plus taxes) at a time of £250 tickets you'd have described that as "irrational" and not seen a P/E ratio worth investing in!

Markets are people, not P/E ratios. People's moods drive markets, not financials, major news events or politicians and their crony central bankers.

Indeed similar to your Gold-Dow we have an 'Affordability Index' in the UK. When average house prices are 2 times a person's income it's reckoned prices are good value and over 4 times it's time for a house market crash. It works but house prices can spend literally years above 4 times earnings so its predictive capacity is rubbish.

It is social mood that drives markets and predicts bull or bear markets not the other way round. Bad news or bad financials bounce off us when we're in a good mood and wanting to risk capital. The fact bad news happens when we're in a bear market mood reinforces

what we feel, it does not predict or pre-date out moods.

[*RSJ: I see why you think the future is unpredictable. It's because you can't measure or predict the "people's mood". You are in the FDR camp. His theme song in midst of the Great Depression was "Happy Days Are Here Again". Kumbayah didn't work then either, as he expanded debt and regulated everything possible.*]

Obama, the Fed and the banks can push as much credit as they like into the market. But the market (consumers and business) are in no mood for it. They have failed to reflate consumer and business markets. Mood is not irrational it's a matter of fact (if not science). But neither is science rational. It explains, it does not rationalise.

[*RSJ: The government has the power to be destructive, not constructive. Government comprises the sweepers in a game of economic curling. It cannot reinflate the consumer and business markets. The mood is not irrational, it is angry.*

[*Spending per se is contrary to economic growth. Rather than a stimulus, spending is a depressant. The model for economic growth is not too terribly difficult. An entrepreneur expands his products or services by borrowing or setting aside his discretionary income, hiring and purchasing, to entice the discretionary income of the consumers. This is all based on a prediction of an ROI sufficient to overcome the risk. When either consumers are broke, or when entrepreneurs have neither discretionary income or borrowing power, growth does not exist. Inflation, regulation, and taxing are huge risks in this calculation, and Obama is dumping on them all. Next is Cap & Trade, possibly the coup-de-grace.*

[*We have established a number of axioms of science, and given them Roman numerals. The Zeroth Roman Numeral, previously fallow, is that the field of science is rational. This is to handle the likes of Paul Feyerabend especially, but other philosopher-outsiders-looking-in like Francis Bacon and Karl Popper. What is indestructible is the Scientific Method, though fallow in climatology. Science is the objective branch of knowledge.*]

Posted by John channel isles | April 6, 2010 11:13 AM

John, Channel Isles wrote:

1004071515

Climate hysteric, James Hansen, of GISS NASA infamy has won a $100,000 environmental prize for decades of work trying to alert politicians to what he calls the unsolved emergency of global warming.

Hansen will visit Oslo in June to collect the Sophie Prize, set up in 1997 by Norwegian Jostein Gaarder, the author of the 1991 best-selling novel and teenagers' guide to philosophy "Sophie's World."

"Hansen has played a key role for the development of our understanding of human-induced climate change," the prize citation said.

Just goes to show there's money in talking sh*t most of your professional life! Did 'hysteria Hansen' collect a similar prize for his equally shrill cries a decade earlier we faced oblivion from an impending global ice age? If so will he give the money back from one prize or the other and give a lengthy speech on how he got his sums wrong.

Hat tip to putting the political message above the science which is Hansen's own stated ambition and sums up AGW rather nicely.

[*RSJ: Academy Award, Nobel Peace Prize, and now the Sophie Award. Too bad Beth Daley of the Boston Globe only came in second for the 2008 Pulitzer Prize for her "evocative exploration of how global warming affects New Englanders".*

[*Is it too late for an award for cold fusion? Regrettably, the Piltdown Prize never seemed to catch on. The name was perfect.*

[*The Pulitzer committee could fill the void by adding a couple of categories: one for Frauds, and one for Retractions.*]

Posted by John, Channel Isles | April 7, 2010 3:15 PM

John, Channel Isles wrote:

1004300841

The uber-active Ken Cuccinelli, the new Attorney General of Virginia, is launching a law suit against Michael 'Hockey Stick' Mann amongst many yummy right-wing manouvres since just taking office.

Cuccinelli's office commands the University of Virginia to produce a swath of documents relating to Mann's receipt of nearly half a million Dollars in state grant-funded climate research conducted while Mann— now director of the Earth System Science Center at Penn State— was at UVA between 1999 and 2005.

If Cuccinelli succeeds in finding a smoking gun like the purloined emails that led to the international scandal dubbed Climategate, Cuccinelli could seek the return of all the research money, legal fees, and trebled damages.

"Since it's public money, there's enough controversy to look in to the possible manipulation of data," says Dr. Charles Battig, president of the nonprofit Piedmont Chapter Virginia Scientists and Engineers for Energy and Environment, a group that doubts the

underpinnings of climate change theory.

The Attorney General has the right to make such demands for documents under the Fraud Against Taxpayers Act, a 2002 law designed to keep government workers honest.

Meanwhile Michael 'Dip-Stick' Mann is mulling over suing a YouTube group for the "Hide the Decline" song. The back-wash for Dip-Stick if he goes through with this case is the defence would have access to all his research material (i.e. data manipulation to produce a bedtime story for Marxists, anti-consumer/capitalist creeps).

http://wattsupwiththat.com/2010/04/29/virginia-attorney-general-goes-after-mann-and-uva/

I don't know if you watched Glenn Beck on Fox News channel last week on the small insidious world of Al Gore, Goldman Sachs and the Chicago Carbon Exchange run by Obama's bosom buddy. Very interesting expose on making vast sums trading nothing much more than hot air and the cross-pollination of company shareholdings.

When Gore was asked about discussing creating (fabricating) a carbon trading scheme with 'fake profits' Enron in Congress he replied, "I don't remember". Funny here we are a decade down the road and his company is doing that very same thing on the Chicago CE with new partner, Goldman Sachs, that expert is 'synthetic' products (getting punters to pay/gamble good money for worthless sh*t).

Emailed some charts to you today regards stock markets being a sign of social mood and being the lead indicator of the economy and therefore election results. Namely a bear market will always oust the incumbent party/Gov't while bull markets always ensure the incumbent Party remains in Gov't.

[*RSJ: Your charts cover four US election years, 1952, 1960, 1980, and 1992, and you identify them all to be bear markets. The bull/bear classification scheme I relied on to on 4/7/10, http://seekingalpha.com/article/99902-historical-bull-and-bear-markets-for-the-dow-1900-present. (citation omitted, 4/7/10 response revised), said all four of those years were bull markets. My conclusion there was the bull/bear criterion was no better than a coin toss. If you want me not to rely on this independent source, you need to provide support for you classification. What is your recipe for the bull and bear classification in your scheme?*]

As Clinton said, "it's the economy stupid". Or someone else once said 'finance and politics are but small boats floating on the Ocean of the economy'.

[*RSJ: The idea of criminal complaints brought against an ethically challenged scientist and an ethically challenged investment bank don't sit well with me. Just as misdemeanors should not be turned into felonies, social mores should made into misdemeanors, and ethics and fiduciary duty should not be codified. On the other hand, other imperatives exist is these two cases which might be well-satisfied by the criminal action.*

[*For climate, IPCC's actions constitute a major breach of fiduciary duty rising beyond the level of fraud. Michael Mann should be considered an officer in that Panel. He was an editor, and appears to have been placed to approve IPCC's adoption of his hockey stick reconstruction in the Third Assessment Report, which was used to conceal that a warmer (MWP) and a colder (LIA) epoch preceded the industrial era, the basis for AGW, based on the illogical unprecedented argument. Mann's analysis might have been mere incompetence, but his complicity in fraud becomes evident as one reads his defense against McIntyre and McKitrick, his attempted concealment against FOI actions, his attempt to manipulate professional journals, and his defense of the spaghetti graph concealment in the Fourth Assessment Report. As has been said here often, the whole AGW theory should be put on trial, and a criminal trial might do, or it might lead to a plea bargain entailing a full, public civil hearing.*

[*For Goldman Sachs, the firm's questioning by the media and the Senate was incompetent, rising to the level of suspicious. The interrogation focused on fiduciary duty. However, unasked questions might have shown GS complicity in the world's economic collapse of 2007. Did GS create contracts (e.g., CDOs, MBSs, ABSs, derivatives)? Were the contracts rated by a rating agency or the subsidiary of a rating agency? What was that rating? Did you pay an agency for that rating? Was a price agreed upon for a specific rating? What were the criteria for ratings? What did the rating assigned convey to the buyer as to the risk in the instrument? Was the rating assigned subsequently withdrawn? And of course, we will have all the discovery to support these questions, and the contributions GS and its clients made to elected federal officials. The evidence is quite good that the rating agencies breached their fiduciary duties by selling fraudulent, inflated ratings for investment paper, then suddenly withdrawing them in 2007-2008 to precipitate the world economic collapse. Money from this fraud funneled to elected officials, enabling rating agencies to refuse to cooperate with investigations and hearings, all of which ultimately failed, and failed to protect the public. This trial, or a plea bargain, could expose this ratings bubble burst, the ultimate cause for Depression 2.0. Look for GS to plead guilty and pay a huge fine to keep the scandal undercover to protect themselves, other firms, and elected officials.*

[*Glenn Beck's thesis is that the federal government has become a criminal enterprise, and suggests links between the climate and the Big Bank Theory. He tells a good story! The trail is about as hard to follow as a puppy across a new rug, as someone once said about elephants in the woods. A proper, professional investigation might tie these two outrageously massive frauds into one or two criminal enterprise actions under RICO.*]

Posted by John, Channel Isles | April 30, 2010 8:41 AM

John, Channel Isles wrote:

1004301320

Meanwhile Deflation of credit (debt) bubbles continues across the pond here in Europe as those waffling cocks, politicians, flap like headless chickens as the credit tide goes out.

[*RSJ: What you call "deflation of credit" I might have called "credit writedown". The difference in the phrase might be regional – your side of the Atlantic vs. mine. Either way, I prefer to write about it in terms of the loss in present value of financial instruments caused by the downgrading of ratings, or even uncertainty in ratings, a rise in market interest rates, or a decline in markets. Also, I don't have quite your perspective of the economic crisis. My narrow view tends to end over here. It's the accumulation of wealth, and hence power, from liberty, from individualism. If the US catches cold, the whole World coughs. From the lip of Krakatoa, the effects of the tsunami an hour later seem secondary.*

[*My economic modeling seems to center around present value*.]

Greece, only 2% of Eurozone GDP, is on its 185th meeting to get Germany, the only truly competitive economy in Europe, to bail them out. The Greek PM appeared this week on TV in an impromptu press statement bemoaning the "greedy" markets who had hiked interest rates on Greek Gov't debt from 12% to 15% then to 17% and onto 20% for 10 year Bonds.

Presumably cooking your books to defraud your way into the Eurozone so when you get in politicians could pig-out and stuff their faces with low interest Eurozone credit is not being "greedy" then! Living beyond your means and now being in the position where markets estimate they'll barely be able to repay 30% of their debt is good responsible stuff.

[*RSJ: If you're looking for an argument, you'll have to pick a different subject.*

[*The socialistic solution is postponement: to bail out Greece. Better for all concerned is bankruptcy. The sooner the socialist experiment fails, the better for humanity*.]

Jean-Claude Trichet, European Central Bank chief, has been waffling and flapping for the last few months. Last week he dropped into a conversation with CNBC after another meeting of vacuous political hot air that he was "an original negotiator with the founding fathers of Europe". Trichet is an ex-French banker, Societe Generale, so it's a small world this Eurozone Project!

Trichet is a bit too emotionally attached to the aim of a socialist European super-State for my liking. He wanted Greece to be bailed out to "honour the founding Fathers wishes" of all things. Shame Greece has effectively driven a horse and coaches through many EU rules regards debt levels, budget deficits, no cross-subsidies to bail out other Euro countries and of course entering the Eurozone using fraudulent books.

No let Trichet not stand on principle and like any good socialist, bleat like a trapped pig to save his bankrupt crumbling dream.

Meanwhile German Chancellor, Angela Merkal, is facing an election in May and German newspapers are throwing their toys out of the pram at the prospect of German taxpayers bailing out spoilt Greeks.

[*RSJ: The problem has boiled down to the essence of socialism vs. capitalism, central planning vs. liberty. Free enterprise is a self-sealing tire. It will work around the punctures of a little bit of socialism. To get all the wealth out, socialism has the problem of perpetually ripping out the patches. The ultimate penalty, economic failure, lasts right up to the end -- slavery.*

[*Greece, the Cradle of Democracy, could be another Coffin of Socialism*.]

Further evidence of the changing tide of social mood was a Bloomberg TV crew in Berlin I watched this week whose reporter said a policeman rushed over when they began filming he thought to move them on. Instead the German copper ranted on about bailing out Greeks' luxury 5 star public sector pensions.

Merkal is between a rock and a hard place and the 'chummy' back-slapping Euro Project over the past 20 years of apparent economic good times is drying up fast. We've all got to start looking after No. 1 not dreamer lefties like Trichet.

And I hear the US Debt house of cards is starting to topple, too. After all asset-backed debt (i.e. mortgages etc) crumbled it's now the turn of "safe haven" US State and Gov't debt. In particular State Municipal Bonds.

Moody's has assigned a negative outlook to the credit-worthiness of ALL local US governments -- the first ever "blanket" valuation of municipalities in the 100 year history of Moody's according to an April 14 article in the New York Times.

[*RSJ: Moody's should be doing this from a jail cell*.]

The article states, "Analysts in the past have considered America's tens of thousands of towns and local authorities too diverse for generalizations. [This report] offers a note of caution for investors who bought muni bonds seeking a safe stream of income in difficult financial markets."

Note of "caution"? Caution denotes an impending danger but as usual the bloody useless credit ratings agents are behind the curve. They are merely 'confirming' what has already happened in the market.

Falling tax revenues, underfunded pension liabilities, rising default rates, suspension of city services, a 90% plunge in the value of monoline insurers (58% of which cover muni bonds), and public officials looking into bankruptcy filings.

Vallejo filed for bankruptcy in June 2008, the first California town to go insolvent since 2001. Greece, California, Portugal, Spain, Ireland and in the ensuing deflationary meltdown the US and British Gov'ts and the entire Euro Project is destined to crash in debt. Maybe one day politicians will learn (not)!!

[*RSJ: The rating system is bust, and no one is trying to fix it. A solution will not exist before the problem is well-defined. We have to get past the cover-up by the cabal of politicians, lenders, and CRAs first.*]

Posted by John, Channel Isles | April 30, 2010 1:20 PM

John, Channel Isles wrote:

1005010232

"The $10 Trillion Climate Fraud'

Page 2 of article: "So lucrative does this market appear, it attracted the attention of London-based Generation Investment Management, which purchased a stake in CCX and is now the fifth-largest shareholder.

As we noted last year, Gore is co-founder of Generation Investment Management, which sells carbon offsets of dubious value that let rich polluters continue to pollute with a clear conscience.

Other founders include former Goldman Sachs partner David Blood, as well as Mark Ferguson and Peter Harris, also of Goldman Sachs. In 2006, CCX received a big boost when another investor bought a 10% stake on the prospect of making a great deal of money for itself. That investor was Goldman Sachs, now under the gun for selling financial instruments it knew were doomed to fail.

The actual mechanism for trading on the exchange was purchased and patented by none other than Franklin Raines, who was CEO of Fannie Mae at the time.

Raines profited handsomely to the tune of some $90 million by buying and bundling bad mortgages that led to the collapse of the American economy. His interest in climate trading is curious until one realizes cap-and-trade would make housing costlier as well."

http://www.investors.com/NewsAndAnalysis/Article.aspx?id=531731

[*RSJ: I was hoping for just such a corroborating article. Congratulations to IBD for carrying the story, and for attributing it to Glenn Beck for uncovering it. Beck is more in the zone for a Pulitzer than was the Enquirer for its vaunted and trivial revelations about John Edward's baby.*

[*From the **Acquittal of CO2** through **IPCC's Fatal Errors** to **Solar Global Warming**, IPCC et al.'s work on AGW is exposed as a fraud. Tracing the dollar flow out of this mess through Gore and Pachauri reveals the criminal activities falling within the reach of the Racketeer Influenced and Corrupt Organizations (RICO) Act.*]

Posted by John, Channel Isles | May 1, 2010 2:32 AM

John, Channel Isles wrote:

1005031605

Latest from Steve McIntyre's Climateaudit website on emails from 'Climategate' reveals the torturous pains the poor IPCC AR4 authors had to go through to keep flogging that old dead horse, the claim "1998 was the warmest year" in a millennium.

It appears they weren't very sure of the science, the temperature data was a bit dodgy and spliced together, in fact is was such crap they only managed to push water uphill by fogging the claim with legalistic word-play and qualifications to cover their arses!

My favourite line, "We are on much safer grounds focusing on decadal/multi-decadal timescales and so this is where we place the emphasis. As for the warmest decade' – this is likely to be the 1990s or the last 10 years – but again, the proxies do not cover this period, and we do anyway state that post 1980 is the warmest period – which I think is fair enough."

Tut, tut, decisions, decisions! They're working out where the "safest ground" is to best manouvre their clapped out pea shooter into position to fire their pea, Shell No. '1998'

Can cobbled together junk be turned into steely hard science with the torturous use of language?

http://climateaudit.org/2010/05/02/ar4-on-1998-was-the-warmest-year/

[*RSJ: The link is not working, but the article is available as a Google cache at*

http://webcache.googleusercontent.com/search?q=cache:XqPypFMvRfgJ:climateaudit.org/2010/05/02/ar4-on-1998-was-the-warmest-year/+1998+waS+THE+WARMES+site:climateaudit.org&cd=1&hl=en&ct=clnk&gl=us

[*Better read it fast.*

[*The problem that becomes apparent is the lack of science behind the process. The IPCC effort is run by a committee, not a scientist, which dilutes the focus. IQs add like resistors in parallel. The IQ of a jury or even larger mobs gathered from average citizens is well below average, though the highest IQ is nicely above average. That is why we require unanimous verdicts. So it is with science IQ, and apparently ethics, too. Whatever genius might have been within IPCC et al. was thoroughly marginalized.*

[*Second, the work is hampered by IPCC's self imposed objective to gather data in support of the AGW conjecture, rather than to model climate objectively. The public, the media, and governments err to think otherwise.*

[*Third is defensiveness for preconceived notions and positions, rather than science correcting itself. Mann's hockey stick reconstruction obliterated the warmer-than-present MWP and the colder-than-present LIA, and IPCC featured it as if unprecedented could ever be valid logic. What Mann did was as a minimum lousy analysis, and IPCC et al. turned it all into a fraud.*

[*Fourth is the unscientific notion that one or two hot or cold years would ever demonstrate anything. Even if we had instrument data going back 1,000 years, and even if 1998 were the hottest, that is not evidence of climate even within any of IPCC's ambiguous ranges between a few decades and a few centuries. The fact that some event or epoch is unprecedented needs to be quantified, reduced to a numerical probability, not converted to a slogan for mob posters.*]

Posted by John, Channel Isles | May 3, 2010 4:05 PM

John, Channel Isles wrote:

1005031705

On the Climateaudit thread I just sent below in the comments there's a link to the announcement of the InterAcademy Councils 'IPCC Review Committee' that'll look at, "..procedures and processes.."

This comes hot on the heels of the British parliaments whitewash using bent crones, some with already stated Pro-AGW views others with obvious commercial interests in perpetrating the AGW fraud, and completely ignoring the actual dodgy methodology used by the University of East Anglia CRU.

So here's your starter for 10 on the 'Spot the Marxists & Crones Competition' in their own words, "distinguished group of experts" of the 12 member committee of 'investigators'. Here's my pure guesses;

Peter Williams, honorary treasurer and VP, The Royal Society, London (the Royal Society is the biggest trumpet in the UK on the Pro-AGW agenda next to the UK Met and CRU)

Louise Fresco, former assistant Director-Gen UN Food & Agriculture Org (UN? What a small world!)

The IAC review will help ensure that future IPCC products have as strong a scientific basis as possible, giving governments and the public confidence in the findings and projections," added IAC co-chair Lu Yongxiang, president of the Chinese Academy of Sciences.

Yes of course it will. Though with the amount of errors in AR4 now reaching Biblical proportions we may not see the poor overloaded IAC again until 2050 which is when we're all amount to be frying on an IPCC tipping point.

http://reviewipcc.interacademycouncil.net/IACNamesIPCCReviewCommittee.html

[*RSJ: A committee, comprising academies that already endorsed AGW, to judge the foisting committee. Are the results predictable?*

[*Instead, the IPCC and its AGW model need to be put on public trial.*]

Posted by John, Channel Isles | May 3, 2010 5:05 PM

John, Channel Isles wrote:

1005041357

Big day on the stock and currency markets today. Led by China with the Shanghai Index down -1.7% then the Europeans followed with London -2.6%, French CAC -3.64%, Spanish Ibex -5.4% and German DAX -2.6%.

They were brought down by the banks; National Bank of Greece got slaughtered -13% and other Greek banks by -10%; Deutschbank down -5%; Spanish bank Santander hammered by -9%; British bank HSBC down 2% and French bank and Swiss bank UBS one of the most exposed to Club-Med debt down -5%.

The Euro hit a 12 month low against the US Dollar and commodities (Copper, Oil, Gold, Sugar etc) all took a hit.

This is deflation. When the credit tide goes out ALL asset classes devalue (get hit). They become "all one market".

Not sure if this is quite the big 55% collapse in stock markets I've been gibbering on about for the last 2 months. We've been stumbling like a drunk recently and might rally a little over the next 1-3 weeks but when we crash it'll be a shocker and indeed a life changer.

The last shreds of optimism and confidence in the investment community and latterly society will disappear this year as pessimism, fear and outright panic take over social mood.

The bad Chinese economic news, Dubai, the Greek crisis, the European debt crisis, the US State municipalities crisis are all adding to overwhelming negativity. Aided and abetted by Gov't propping up zombies, already deeply indebted countries in the Eurozone

propping up other crumbling countries in the Eurozone.

It's turning a large mole hill into a mountain. A can being kicked down the road that gets heavier and bigger every time they take the soft option and bail out unserviceable debt with even more unserviceable debt. Suicide socialism.

Posted by John, Channel Isles | May 4, 2010 1:57 PM

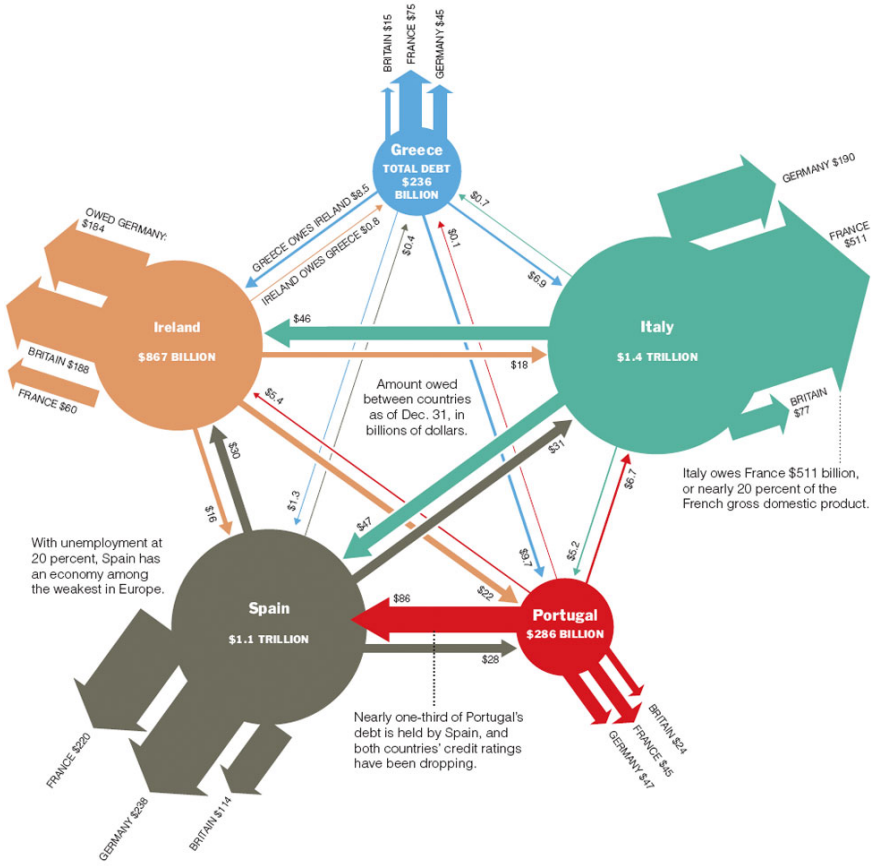
John, Channel Isles wrote:

1005061151

Here's the suicide socialist European House of Cards in graphic detail

http://www.nytimes.com/interactive/2010/05/02/weekinreview/02marsh.html?ref=weekinreview

[*RSJ: Here it is (click to enlarge):*



Europe's Web of Debt
Figure 26

Britain is exposed to the PIIGS (Portugal, Ireland, Italy, Greece and Spain) to the tune of over $400 bn, Germany is on the hook for $700 bn and France over $900 bn US Dollars.

[*RSJ: The chart is loaded with data, but little information. It would be half as complex if the debt had simply been net between the five nodes. Your analysis suggests, quite properly it would seem, that what counts is net debt exposure of the off-chart, non-PIIGS.*]

Our soon to be gone suicide socialist Prime Minster, Gordon 'bankrupt' Brown, stretched the Gov't's bent cooked books to breaking point bailing out British banks to the tune of £300 bn Sterling. If these PIIGS do go down we do to.

[*RSJ: Are you sure he's going?*]

You owe me

I O U

You go bust

I do too

It's a re-run of the credit crisis. Deflation is a credit crisis. And we're all linked together like a house of cards. Word is the banks are starting to fear lending to each other again as nobody's quite sure who owes what to whom so who's exposed in this shambolic Banking-Government clown show.

[*RSJ: I still disagree. We're in a highly inflationary mode. The currency supply, or money supply if you insist, is being expanded at a horrific rate (the Fed buying down interest rates, distorting the market). That expansion is by definition inflation, recognizing that the consequential rise in general prices is inevitable missing a commensurate increase in the output of real goods. Credit is being devalued – too much borrowing, too little income (GDP), and too much uncertainty (as in ratings). For the moment, the depreciation is reflected in declines in credit ratings, but that's nearly an accident as the rating agencies tip toe on their best behavior. The general rise in prices is latent with respect to the CPI standard, and when that materializes, as it must, it will carry interest rates with it.*]

Meanwhile the EU and the European central Bank are breaking their own rules. Not only have the likes of Greece cooked their own books to get entry to the EU so they could pig out on cheap 3% Euro credit/debt. But they've all broken EU rules on running budget deficits larger than 3% of GDP (think 9-12%) and are looking to rip another rule, EU members don't bail out other members.

[*RSJ: The debt is interesting when contemplating exposure in bankruptcy of individual countries. You suggest a vital measure: the ratio of debt to GDP. But we can improve on that measure. How about revising the chart to show not the debt principal but the cost of debt service as a share of GDP? Better but still not optimum, how about the ratio of debt service costs to non-government share of GDP? What we want in the denominator is a measure of the GDP that contributes to wealth. Nationalized industries don't, nor do enterprises wholly regulated by the government.*

[*Debt service is proportional to principal and market interest rates, and those rates are proportional to the extent of borrowing. Debt service is the first thing to go critical in national bankruptcy, but it seems to be the last thing that comes to mind in the media and among economists.*

[*The lefties in the U.S. (at least) feel they can borrow indefinitely, creating a burden for our children and our grandchildren, according to the cliché of the right. The left skips the progenic (new word) day of reckoning, but in the backs of their simple collective (pun intended) minds is the notion that the economy will grow reducing the proportion of debt to a manageable size. The model on the right is simplex; to the credit (no pun intended) of the left, their model goes the right one better – it's duplex. The debt service crisis requires several more levels of thinking, though. The principal is already out of hand, and the interest rate will materialize as soon as recovery begins in earnest, and the Fed quits buying down interest rates (monetizing the debt). We don't have a generation or two. What we have could be a year or two, or it might last as long as Depression 1.0 --17 years, or to the resolution of the next international physical catastrophe, e.g., WWIII, supervolcano eruption, meteor impact.*]

Yep, total anarchy. The politicians, the Gov't, are the garbage bin of society. The best way to collect the scum of society. Break rules, throw the Rule Book out of the window and your toys out of the pram and the suicide socialists of Europe will come bail you out.

[*RSJ: My thoughts ran to the scum of society as I watched the union-led proletariat murdering and burning in Athens. This is what socialism creates. The Greeks are just slow to realize that to enforce a full government run economy, unions cannot be allowed. The lesson unlearned in the U.S. is that unions can be given way too much power.*]

Meanwhile US Treasury Secretary, Tim 'tax cheat' Geithner said of his 'solution' to your Big Bank bailouts that his new Bill will make sure if large financial institutions managed to find themselves needing Gov't support again, the Gov't will put them into receivership, wipe out shareholders, replace management and will wind down the firm. We dismember it, he said.

[*RSJ: Quotation marks deleted for lack of a source. However, the paraphrasing, if that's what it is, is supported by Geithner's Written Testimony to the House Financial Services Committee, 10/29/09.*]

Never mind that this is precisely what a free market would have done to Goldman Sachs in 2008 had Geithner and his friends not bailed out the very firm he is now attacking for still being alive! So after advocating Gov't bailouts he's now 2 years down the road advocating the free market solution of wound down bankruptcy, managed by Govt. The Gov't and people running it just dumb and dumber!

[*RSJ: Goldman Sachs was a well-placed, favored but relatively minor co-conspirator in the securitization scandal that involved federal over-regulation, fraudulent ratings, breaches of fiduciary duty, and bribery. The firm is now to take its whipping without whimpering as the government blamelessly creates another crazy layer of patches to a failed system that it was complicit in creating.*

[*Goldman Sachs is in the securitization business, creating derivatives, purchasing phony ratings for them, and selling the product to traders and institutions. The raters are currently walking on eggshells, keeping everything above board for the time being. So, according to the media, GS took another tack: it phonied up Greece's debt, secretly disguising its borrowing as currency trading, and sold some new insurance. Is that the book-cooking you referred to?*

[*What should have happened to Goldman Sachs should be allowed to happen to Greece. It needs to have its union contracts with generous retirement at age 53 broken and replaced with contributory pensions. Either that, or reduce Greek life expectancy to 57. Socialism keeps running aground on numbers.*]

`

Geithner has cheered signs of recovery and credited it to massive amounts of Gov't stimulus (not much of a political option to do anything but!). Geithner has bragged the bailouts will be a bargain for the US government. This is going to cost us much less in fiscal terms than even the S&L crisis, he said.

That should be one of the greatest misstatements in Gov't financial in history in the coming years.

[*RSJ: While I was reviewing your post, Fox News was carrying the street riots in Athens with the Dow glitching and lurching down 1,000 points superimposed. Meanwhile, the Department of Labor was reporting U.S. unemployment for April ticked up again, now to 9.9%, showing no significant recovery yet. On April 29, 2010, I wrote:*

[If you like to dabble in the market, go short in the index funds.

[http://journal.crossfit.com/2010/04/glassman-sgw.tpl#comments

[*We (meaning mostly the U.S.) are going to bail out Greece, exacerbating the problem but fixing nothing – not the financial racket with its broken rating system, nor the drains of Greek and U.S. socialism. Who's going to bail out the U.S.?*

[*So what does all this have to do with CO2, the subject of this blog topic? Perhaps we can stretch it into an analogy: economists are to the economy as climatologists are to the climate. All their models are shams.*]

Posted by John, Channel Isles | May 6, 2010 11:51 AM

John, Channel Isles wrote:

1005061157

Here's the link to the main New York Times article that goes with the graphic.

http://www.nytimes.com/2010/05/02/weekinreview/02schwartz.html?ref=weekinreview

This is why everyone cannot shut up about Greece, only 2% of Euro GDP, because of 'contagion'. The politicians want to "stop contagion" but we all know how competent and effective political management is... not a snowball's in Hell's chance!!

[*RSJ: What in the world are the links by which Portugal, say, catches what ails Greece? Of course, the contagion might flow from bank to bank as a new round of indecipherable derivatives collapses.*

[*If the governments and banks want a contagion, all they have to do is reward the bad behavior (aka good socialism) demonstrated by the Greeks, among others. Greece is going first because it has the smallest GDP to fritter away.*]

Posted by John, Channel Isles | May 6, 2010 11:57 AM

John, Channel Isles wrote:

1005131457

Dr G,

I wholly agree with your view debt would be massively better described against the countries private, wealth generating, sector and its ability to repay it rather than just the pat figure of GDP. It would be even more terrifying than the 300-500% debt to GDP figure is already.

But worry not, the British debt to GDP of 360% with the Gov't consuming 53% of GDP is sorted. The new coalition Tory-Liberal Gov't (2 Parties of lefties as we have no right wing anymore) have authorised a wage cut for MP's of 5%. that's alright then!

Ok they've promised to "ring fence" all the grotesque spending required to prop up all the pillars of the rotting, bankrupt socialist State of Britain. State education, State healthcare, State police, State subsidised nuclear energy and green aeneegry *[RSJ: que?]*, public transport yabba dabba doo. But 5% off their wage bill and a £6bn cut in a budget deficit running at £160bn per annum is the "tough hard decisions" to give us all confidence. All is well, problem sorted!!!

Regards the definition of deflation and inflation you use I believe may be academically correct but not 'reality accurate'! I had a debate with someone quite recently about money and their academic definitions (means of exchange etc.) which did not include the most fundamental part of any currency, human trust/confidence in the currency.

[*RSJ: Certainly human trust and confidence play a role. Gresham's Law is an example. And as confidence in the dollar continues its fall, we have an impetus to buy before prices go up, from consumer goods to gold. It's a monetary velocity.*]

A rich aide to President Franklin Roosevelt thought he was being smart withdrawing his money from the bank a few days before they melted down during the 1929-35 Depression. His $100 bills were worthless as no shopkeeper trusted the banks, the Gov't or currency.

Similarly the (academic) definitions of inflation being the printing of money and deflation the contraction of money supply are broke

as far as I'm concerned.

[*RSJ: We call it the printing of money, but what counts is putting currency into circulation faster than output is rising. The Federal Reserve can have any amount of money printed, with no effect as long as it sits in a vault.*]

We are enduring massive deflation everywhere (house prices, contraction of credit markets etc.) despite all the massive printing of money from central banks. We've nearly run out trees but there's no evidence of inflation!!

David Rosenberg, an economist with a real understanding of deflation, said about inflation this, "If you haven't noticed, real M2 is down year-over-year for the first time in 15 years. A reconstituted real M3 is deflating now year-over-year for the first time in 50 years. Wake us up in 2015 when the inflation comes."

When consumers reign in their credit card spending, pay off mortgages, cards and other debts that deflates consumer goods markets. When US municipalities cut budgets because their credit's no good and they can't borrow anymore that deflated their spending. And it's deflation that is soon to hit the stock market, commodities and all other asset/investment classes (commercial and real estate). Ditto Greece and the PIIGS.

Deflation must include the human perspective and indeed reality. The academic definition does not describe that which is happening just as accountants balance sheets do not describe companies. The banks 2007 balance sheets looked great but by 2008 the reality painted quite a different picture.

Some interesting posts by astute old (Gold) sage, Jim Sinclair, on the state we're in.

His post, May 12 at 3:27 pm, says, "The Swiss-based Bank of International Settlements (BIS), the oldest international financial institution in the world.... BIS warns that Greece isn't the only Western economy with hazard lights flashing.

Indeed, it names 11 more: Austria, France, Germany, Ireland, Italy, Japan, the Netherlands, Portugal, Spain, Britain – and the United States. Without "drastic measures," BIS says, all of these countries will hit a wall of debt."

Jims post, May 11 at 3:24 pm, says, "Morning thoughts:

1. A trillion in a Pan-European bank bailout may not be enough.

2. Fannie is still in the trash can and is getting worse.....

.....Yesterday morning the financial community was cheering the Shock & Awe of the trillion dollar Pan-European bailout.

The Shock & Awe occurred when the euro dropped 200 points from above the $1.30 level. Expect the PPT to be at work today.....

...Rescue Wall Street, and screw Main Street.

[*RSJ: PPT stands for "Plunge Protection Team", the colloquial name for Reagan's Working Group on Financial Markets, charged with intervening in a collapsing stock market ever since the 1987 sell-off. PPT has been often charged with secret, illegal intervention in the markets and futures with federal funds.*

[*More obvious is U.S. banks buying equities with bail-out money, meaning the federal government is propping up the stock markets. Good evidence for this model is the Volcker Plan, which is now on the table in the new banking regulation. It is designed to segregate banks into two forms, one to do commercial banking and the other to trade for their own accounts. When the Volcker Plan goes into effect, stocks will plummet.*]

Food-stamp tally nears 40 million, sets record

(Reuters) – Nearly 40 million Americans received food stamps — the latest in an ever-higher string of record enrollment that dates from December 2008 and the U.S. recession...."

(END QUOTES)

You asked what our economic discussion has to do with CO2 and concluded both models are "shams". Yep. And both models are based on suicide socialism mangling free markets (energy, money supply, interest rates, housing/sub-prime etc) heading at ramming speed toward a train crash that'll make 1929-1935 look like a warm up act!

[*RSJ: If you want to see through the inflation/deflation matter, just price everything in ounces of gold. See what World GDPs and stock markets are doing then.*

[*We have two political parties over here: the Marxist Party and the Bipartisan Party. Both parties are organized according to their individual economic perspective. The Marxists are collectivists, and the party members spout back memorized talking points like pull string dolls. The Bipartisans are for individualism, so its every party member for himself! The Bipartisans get nothing done except by condensing around the principles of the opposition. Excellent examples: Sens. McCain, Lindsey Graham, Bob Bennett (now out), Crist (wannabe). Every bill that gets passed in the U.S. is another half step toward Marxism and bankruptcy.*

[*Another movement is underway in this country that well might change the calculus of elections for decades. The economic crisis is driving the Tea Party movement, and the unchecked invasion of illegals across our southern border is polarizing the populace. The Marxists say this is bad news for the Republicans because they will lose their hard-earned gains among racial and sexual minorities, and those on one kind of dole or another. That would be true, but the new calculus is the white and yellow, working middle America that is*

undergoing a giant shift to starboard.

[*The biggest threat to this model is the Republican Party itself. It wants to morph itself into the party of the religious right, which will again marginalize it. Examples: most Fox News reporters, Govs. Mike Hukabee, Sarah Palin. This faction would break down the separation of church and state in ignorance of the fact that that separation is what gave Americans religious freedom in the beginning. The Tea Party seems to be aware of this Republican weakness, and encouragingly is hugely popular without a religious plank. Counterbalancing is the Marxists romancing of the gays as one of its power groups.*

[*We could develop into a solid conservative nation. If so, we will need to reconstitute our school system and train a new generation of individuals instead of victims.]*

Posted by John, Channel Isles | May 13, 2010 2:57 PM

John, Channel Isles wrote:

1005161317

"Lies, damn lies and Government statistics"

Found a new website for statistics, primarily the truth behind the US Gov't's if you're ever in that area. Compiled by an MBA in Economics, John Williams, and who has become an expert in Gov't's statistics "out of necessity" during his 25 years on consulting.

From his website: "One of my early clients was a large manufacturer of commercial airplanes, who had developed an econometric model for predicting revenue passenger miles. The level of revenue passenger miles was their primary sales forecasting tool, and the model was heavily dependent on the GNP (now GDP) as reported by the Department of Commerce. Suddenly, their model stopped working, and they asked me if I could fix it. I realised the GNP numbers were faulty, corrected them for my client (official reporting was similarly revised a couple of years later) and the model worked again, at least for a while, until GNP methodological changes eventually made the underlying data worthless.

"That began a lengthy process of exploring the history and nature of economic reporting and in interviewing key people involved in the process from the early days of government reporting through the present. For a number of years I conducted surveys among business economists as to the quality of government statistics (the vast majority thought it was pretty bad), and my results led to front page stories in the New York Times and Investors Business Daily, considerable coverage in the broadcast media and a joint meeting with representatives of all the government's statistical agencies. Despite minor changes to the system, government reporting has deteriorated sharply in the last decade or so."

Says it all really!

[*RSJ: Long response in prep.*]

Posted by John, Channel Isles | May 16, 2010 1:17 PM

John, Channel Isles wrote:

1005191334

All is well, Timothy Geithner said so interviewed on CNBC this week on some empty dockyard somewhere presumably waiting for a boat from China to come in with some more lolly to spend!

Geithner assured us Europe can "manage their problems". In this career public sector cronies judgment he also assured us California and New York were not similar (though their debt to GDP ratios are) to Greece, Portugal and Spain and US States weren't susceptible to contagion like Europe. He gives you that warming feeling all is alright.

Regards famous last words the Eurocrats of the EU demonstrated their King Canute like powers to "support the Euro at any cost". They threw $1 Trillion at "supporting the Euro" and "stopping contagion" and to be fair, the Gov't debts of Greece, Portugal and Spain did get released from Accident & Emergency.

But the path of the Euro continued to the critical list. It's dropped from $1.30 to $1.21 in the past 10 days, simply unheard of fluctuations for a major global currency. A brief blip on 10th May holding it up for 2 cents for all of 24 hours on announcement of the Euro bailout is all they got for their $1 Trillion blowout.

Never in the history of abjectly impotent politicians has so much money been spent by so few for so little effect. Well except for the US Gov't and the Fed in 2008 trying to reflate deflating credit and stock markets. And excepting the British Gov't and Bank of England trying to protect Sterling in the 80's in another case of political futility blowing £2 Billion (that's when £2bn was 'real money' and actually worth something!).

I agree the Republicans are mistaken to enroll religion in the political machine. Glen Beck did an expose last night on Obama's attempts to bring the Marxist religion of "social justice" and "climate justice" into the US EPA and Churches across America. The EPA will be cross-subsidising new Churches under the ruse of being 'green buildings'.

We're only a few steps away then from the looney left turning Al Gore and James Hansen into Saints and being worshipped on Sundays in green Churches. And then you Yanks have not a plank to stand on criticising us suicide socialists here in Europe. You'll have overtaken what has taken decades for Europe to achieve through left-wing stealth in 2 short years of the turbocharged high octane Obamaworld steam train to socialism.

[*RSJ: Response in prep.*]

Posted by John, Channel Isles | May 19, 2010 1:34 PM

James Gardiner wrote:

1005271717

This is not really intended for publication. But I fear this back and forth about economics detracts from the good scientific aspect and puts you in a bad light hence maybe you should bin it to preserve the rest. You seem determined to blame some nebulous forces of international socialism for the current mess despite many facts to the contrary. …

[*RSJ: I hope I have not violated your confidence, but your points have troubled me, and are too well taken to ignore. I had given serious consideration to creating a separate entry for economics, but the problem is the tentacles of politics and economics reach inextricably into Anthropogenic Global Warming.*

[*At the first layer of the onion are the politics of academe and government laboratories, which are not above reproach for the appearance that they would place their vested interests in the reputations of their leaders and acquiring ever bigger Supercomputers and contracts to compromise their science in favor of scare tactics. At the next layer is the IPCC, an agency of a discredited political body, an agency that has redefined its own charter from scientific investigation to manufacturing evidence to support the dogma of AGW. Sharing the next layer is the United States Congress, which has adopted AGW as it fits nicely into a couple of tenets of its clandestine Marxist program. What a great word,* nebulous*! What is vague about the anti-corporate sentiments of those who rage against Big Oil and castigate Wall Street, and the take over of failing banks and manufacturers for unions and cronies to run? And what is more important to the science fiction of AGW than its omission of the dominating, overwhelming negative feedback: the extent of the nebula?*]

Viz:

• The major contributing problems were deregulations of the banks and finance houses that were carried out by both conservatives and liberals, and influenced by your favourite Chicago school right-wing economists.

[*RSJ: I hold no such view about deregulation, nor do I subscribe to any school of economic thought. Neither do I know how you could have deduced that I do.*]

• China, seem to be doing everything right despite being the most visibly socialist entity on the planet. Even when exposed to too much US dollar debt they have successfully used it to corner the rare metals market.

[*RSJ: The rules for the people of a socialist State are but propaganda, and not rules for State activity. China is behaving rationally, i.e., not socialistic, with respect to ownership of US treasuries and with respect to gold. China fears the rapid depreciation of the US dollar. China is stockpiling gold, and is incapable of cornering the rare metals market, ranking only fifth among the nations of the world in gold reserves.*]

• The US seem to be doing everything wrong despite being the most visibly capitalist entity on the planet.

[*RSJ: Capitalism is the natural economic system of liberty, so the US leads in capitalism. Capitalism produces the wealth; socialism consumes it. The US is visibly the nation in the most rapid state of transition, from liberty to serfdom, from capitalism to socialism. The US is undergoing the most wrong-headed transition in its history, and in the history of capitalism.*]

• It was the righty Austrian school and the lefty Keynesians who both predicted the crisis while the Chicago school all seemed to believe in magic invisible hands that magically would correct the market should it go wrong. Alas the latter were listened to, apparently solely by dint of being so blindly optimistic.

[*RSJ: The world is in economic crisis. If that's the crisis you are talking about, no one predicted it. No one has even characterized it correctly, except, modestly, on this blog. The US mortgage industry was over-regulated. Lenders were obliged by Federal Regulations to make a high percentage of bad loans. In good free enterprise fashion, the lenders figured that they could bundle the bad loans together, and securitize them. But to sell those bonds, they needed high ratings. To the rescue came the three US-based rating agencies, who conspired to abridge any sense of public or fiduciary duty to sell unwarranted high ratings, i.e., AA and AAA, to junk bonds and to ABS backed eventually by junk bonds. They admitted privately they were building a house of cards, but in the back of their collective mind might have been the idea that Fannie Mae and Freddy Mac were guarantors. This was not capitalism on any level. It was not competing in an auction. It was monopolistic, conspiratorial, and criminal malfeasance.*

[*As securitization passed through over 20 levels of re-securitization, the rating agencies got paid again and again for the same false stamp of approval. It was a cash tree. The first tier of securitization, generally Fannie and Freddy, made huge cash donations to the leaders in Congress, overwhelmingly from the same party that invented mandatory bad loans in the first place. When Bush '43 tried twice to defend against what was going on, the rating agencies threatened Congress with retribution should it act. They refused to reveal their criteria for hiring raters, or what their ratings meant with regard to default statistics, or anything else. They threatened to withdraw their*

ratings from instruments held at Fannie and Freddie if Congress tried to limit the exposure of those GSEs. Congress, being on the take, caved. The quid came due for the quo.

[*Then in 2006 to 2007, when the ratings began to prove false, 10% defaults instead of much less than 1%, the agencies suddenly, precipitously, withdrew their fraudulent ratings, and the international financial system, which leans on those ratings, collapsed. They didn't even have the sense to let the market work out a sensible response. Instead, they made the entire rating system unreliable. And nothing has been done or even been contemplated to remedy these underlying causes. The Austrian school, the Chicago school, and the Keynesians have nothing to teach us about such concrete unwise and criminal transactions. The lesson comes from the trusted Congressional School of Influence Peddling.*]

The facts suggest - nay scream - that it wasn't too much socialism that was the problem but too much deregulation by right wing influenced economists. The ratings agencies failures you mention were a failure of capitalism, not socialism. Any massive correction by bank failures may well have sorted the system out (maybe not) but it was capitalists, i.e. Wall Street (mainly Goldman Sachs) that prevented that happening. So while the debt was socialized, the profits were and still are pocketed by crony capitalists: reverse socialism if you will. Your continuous dogma against socialism seems to disallow clear analysis that mere greed, short-termism and blusterful over-optimism in self-correcting markets were the issues, nothing to do with the colour of anyone's politics.

[*RSJ: As described above, the core of the problem was over-regulation, not deregulation. Forcing companies to grant bad loans would have been aggravated by regulating the securitization process, not repaired. Socialism is an interesting phenomenon. It is the institution of economic decisions not supported by free choice. It never works, but survives as long as the national wealth holds out. It demands ever increasing reductions in individual liberty.*

[*Not everyone with the label capitalist is practicing capitalism in all his endeavors. We are constantly weeding out the bad guys in order to preserve capitalism, not to justify socialism. Crooks come in all colors, although* socialist crook *seems redundant.*

[*You refer to my "dogma against socialism". Dogma is a doctrine laid down by authority, as opposed to the results of an objective model. Man causing global warming is dogma; the Sun causing global warming is not, it is theory. The opposition to a dogma does not inherit the properties of dogmata.*

[*Socialism is the economic system of Marxism, which has three tenets: Collectivism (anti-individualism), Serfdom (anti-freedom), and Revolution (anti-self-government). Socialism is government control of the means of production, service, and distribution of goods, and of the profits therefrom. It can be estimated continuously by the rates of taxation and the government share of GDP. It is not a state of being, but comes by the pound.*

[*If there is anything about this model with which you would quibble, please respond. But dogma it isn't.]*

While indeed you are likely correct in your discussions about debt and also in many observations about the anti-entrepreneurial effect of too much socialist regulation, you can't just ignore the role of conservatives in this, e.g.;

• The massive debt spending by Bush baby on pointless wars that had nothing to do with 9/11 thereby turning Clinton's surplus into a deficit. Reagan administration that started the idea that debt was nothing to worry about.

[*RSJ: At the core of 9/11 was a movement sponsored by a consortium of Islamic States, with Iraq strategically at the center. It was terrorism under the cry of "Allah acbar" targeted against the US to weaken our overt interference with Islam's near term objective of removing the Jews from the Arab peninsula. Bush '43 successfully, so far -- yet to be destroyed by Obama --, cored the consortium, democratizing the central participant and leaving the three others as islands without contiguous access to one another, and severely weakening the Islamic would-be terrorists on the perimeter. This was at once severe punishment for an act of war, and a crippling blow to their ability to wage war. It was in accord with the first principle of warfare: take from the enemy the thing he cherishes most. In this case, the enemy was undertaking a land grab, and they were repaid in kind. The retribution hit ground zero.*

[*I would grant you that Bush could have handled the war financing better. I believe that he had in the back of his mind getting the war bill settled by the Islamic states, and especially Iraq. He was never very articulate in expressing much of anything. Settlement, though, could still happen, except that the importance has been trivialized by Obama's spending spree.*

[*How about a citation in context for the statement you attribute to Reagan. In the Obama context, it is pure silliness.*]

• Phil Gramm was the architect of much of the deregulation dogma that allowed the junk debt vehicles, irresponsible speculation and other tricks.

[*RSJ: The dogma of the right freely to enter contracts? That dogma? But I'd wager that Gramm's plan didn't include rating B bonds and their 20 odd layers of derivatives as AA and AAA, and for a secret price. There would have been no crisis or collapse but for the fraud in the sale of ratings, and their precipitous retraction.*]

• Nixon ended the Bretton Woods agreement architected by Keynes, which would have pegged any debt back to sensible levels.

[*RSJ: Sensible in a socialist sense? Surely not in a market sense. But Nixon was no conservative. He instituted wage and price controls. Don't equate conservatism with incoherence. Bretton Woods was a socialist's, e.g., Keynes', dream, designed to counter the vices of speculation and competition. It was anti-market, and more. It was the foundation for the tap into the US treasury called the International Monetary Fund. It was the monetary component of the United Nations and the phantasy of world government, the ultimate triumph over republican self-government and the rights of the people. If not a prototype for the Euro (it would have included a new world currency if it could), BW was based on the same principles, causing failing states to become contagious, diseased, dependent states.*]

• Most welfare state reforms via the new deal happened at a time of burgeoning prosperity thereby proving that socialism - when it doesn't descend into totalitarianism - and capitalism can be good bedfellows.

[*RSJ: The fallacy here is three-fold. First, the welfare state was born out of the depression, a collapse of prosperity. Second, the New Deal prolonged that Great Depression. Instead of ending after a couple of years in a recession, the New Deal stretched it into a gut wrenching 17 years of hardship and stagnation. Third is the failure to recognize that socialism consumes the wealth produced by capitalism. Socialism produces no wealth, but confiscates wealth to consume it under the promise of economic equality. That promise is true enough in implementation, but equality occurs only when everyone is in poverty. It's a populist equality exchanged for a reduced standard of living. Socialism focuses on the disparity, never the absolute value. While the tide lifts all boats, socialism drills holes in the hulls.*

[*The old saw of Progressive Socialism is redundant. Socialism doesn't work, and as the pool of wealth shrinks, freedoms must be restricted. It's a downhill course.*]

• To prove that, the traditional money-making US states have mostly been very liberal.

[*RSJ: Quite true. Socialism by intent produces an ever growing dependent class, and the plan is they all be voters. Wealth leads to largesse, and largesse leads to what Reagan called Uncle Sam's plantation. Those states have followed your scenario, and now are bankrupt. It was all unnecessary and predictable.*

[*This is the magic of our republican form of government, of federalism. Instead of national catastrophes, we in the US enjoy the remnants of a laboratory for trial and error. As we grow into an ever more centralized government, the major tenet of our left, we sacrifice more of that benefit. The left has become so threatened by the looming bankruptcies that they are agitating to make beholden citizens out of illegal aliens, holding some states as victim-hostages to their program to engorge their demographic base. We're talking about 12 million or so freshly minted citizens where national elections are decided by 1 to 8 million votes since Reagan.*

[*My candidate for the most important right in the Bill of Rights is the Tenth Amendment, which in theory, that is, literally, reserved to the States all matters not expressly granted to the United States. The other rights did little practically except to provide uniformity, and by subsequent Supreme Court unfettered legislations in the 1890s, extend the reach of the Constitutionally limited federal government.*]

Now I and most properly thinking folk agree about the debt splurge being total stupidity but that doesn't mean that it is a left-right issue. Both sides were and still are taking their advice from major economists with their own competing dogma, either misunderstood Friedman or misunderstood Keynes. For my part I believe Friedman and Keynes would both have called this debt splurge "Casino Capitalism" (A Keynes phrase). The fact is that Keynes didn't have one philosophy, he changed his advice according to what seemed to work and what didn't, famously saying "when the facts change I change my mind".

[*RSJ: No school of scientific economics exists, at least outside engineering. The field is treated as a social science. It has schools of thought, dogmas if you wish, and advocates. Economists are like court room experts, you can buy what you want for either side of an issue. Keynes was an apologist for free spending government. He is credited with being mathematically rigorous. So were the AGW climatologists. Not everything Keynes said was wrong, only enough was.*]

The whole problem as I see it is that intellectuals nowadays all too easily fall into ridiculous half-baked, half-researched dogmata. That is clearly true of the anti-capitalist IPCC scientists but also your (and John's) own anti-left rants. Skepticism is always smart – especially skepticism of your bedfellows.

[*RSJ: D'accord. You remind me of two stories.*

[*During the Korean War, a GI missing for a while returned to his post bloodied and in tatters. His sergeant asked what happened. He explained that he was the lone survivor of his patrol when he came across a lone Chinese. They argued. He said, "'Truman is a s**t', and I said 'Mao is a turd". We stood there shaking hands when we were run over by a tank."*

[*{Start Rant.} Observe that the US now has two political parties: a Marxist Party and a Bipartisan Party. Every bill that passes is at minimum a Marxist inroad. The debate here is not left vs. right, but right vs. wrong. The names are confusing. Our right wing has self-deconstructed into me-too, theocratic, libertarian conclaves, readymade for composting into a Marxist collective. The issue is principles, and the whole of Marxism is hideous, inhumane, and anti-Western-culture. Our tested principles are not compromise, Judeo-Christian Government, and Isolationism. They are Individualism, Liberty, and republican self-government. These simple and direct principles may be undergoing a rebirth in the center of the US political spectrum. We can thank Obama for bringing them into sharp focus. Maybe the contagion will reach your side of the pond.*

[*AGW is a failed science. Global warming is real, and random. AGW is a Flat Earth, Cold Fusion, Piltdown Man fraud. It has been appropriated as a tenet of the left as the ultimate boot on the neck to strangle all manufactured goods, environmentally controlled spaces, and the energy sector. It is a looming economic disaster, and environmentally more unsound than restricting new wells to water, and then to deep water, or banning DDT and nuclear power stations. It is Marxism and filled with inanities.*

[*As in all totalitarian regimes, a key tactic of the left is, as it must be, to repress dissent. This is as true of AGW with its peer-reviewed, professional journal, house organs as it is of the developing Marxism in the US and its mainstream media. So if we attack AGW, we take on Marxism. {End Rant.}*]

Posted by James Gardiner | May 27, 2010 5:17 PM

John, Channel Isles wrote:

1005281401

Well it's been the worst stock market performance (US and European) for the month of May, traditionally a bad month for stocks, since 1962. And it's going to get far worse. This year will be absolute carnage on the stock markets.

Still all is well, Timothy Geithner says so. There's nothing to worry about, and here's why, the politicians will save us...

http://www.youtube.com:80/watch?v=H0a_FA_J6Sw

[*RSJ: Bravo.*]

Posted by John, Channel Isles | May 28, 2010 2:01 PM

John, Channel Isles wrote:

1005281653

Yep, the Government have all the answers:

http://www.youtube.com/watch?v=TsZK59Zx0g4&feature=player_embedded#!

What was it Ronald Reagan said? The scariest words you could ever hear is, "I'm from the Gov't, and I'm here to help you"

I get that that warm fuzzy feeling every time I see Obama and Tim Geithner. Don't you Dr G ?

[*RSJ: Tim Hawkins sings "The Government Can". 3:04.*]

Posted by John, Channel Isles | May 28, 2010 4:53 PM

John, Channel Isles wrote:

1006141254

Tim Hawkins song "The Government Can" (link in above post) has now 3.3 million hits which is good as it strikes almost every target on why this monopoly institution is such a bankrupt sham.

James Gardiner posted above we're dragging down the climate science discussing politics and more broadly with "dogma" toward socialism. I'd welcome any news of any socialist policy in history that actually achieves, sustainably, what it sets out to achieve?

[*RSJ: AGW is spent as a science. Once a conjecture, presumed by IPCC to be a theory, it is now contradicted, putting it off the scale of scientific models. Nevertheless, Climate science is alive and well, and so is AGW as a political movement. This is known as the Fourier transform, where we switch seamlessly from Joseph to Charles.*

[*Here is an especially good definition of socialism from Britannica Concise Encyclopedia:*

> [System of social organization in which private property and the distribution of income are subject to social control; also, the political movements aimed at putting that system into practice. Because "social control" may be interpreted in widely diverging ways, socialism ranges from statist to libertarian, from Marxist to liberal.

[*This is superior to definitions that rely on the ownership of the means of production and distribution of goods. The reason is that the basic tenet of socialism is egalitarianism. It is a movement based in populism and promoted through envy, whether achieved through democratic processes or by revolution. Egalitarianism relates to wealth, as in "the haves vs. the have-nots".*

[*As some anonymous soul scribbled in Wikipedia,*

> [Economic egalitarianism is a state of economic affairs in which equality of outcome has been manufactured for all the participants of a society. It is a founding principle of various forms of socialism, communalism and cooperative economic organization.

[*Sometimes definitions are plucked from where you find them.*

[*Egalitarianism isn't restricted to economics, however. It applies to anything by which a politician might fan the flames of envy. For example, this week Barbara Pierce Bush, W's elder twin daughter, is President and Executive Director of Global Health Corps, a U.S. "nonprofit that aims to improve the quality of health services for the poor", according to Wikipedia." Another web site says, "Global Health Corps (GHC) aims to strengthen the movement for global health equity", among other things. Which is it, the quality of health services or equity? Bush resolved the question on Fox News Sunday last. She said,*

> [Why do, basically, people with money have good health care and why do people who live on lower salaries not have good health care? You know, health should be a right for everyone."

[*So Bush is focused on the disparity, the inequality in health care and not in some absolute, minimum health care. This is egalitarianism or equity, not a minimum standard of living.*

[*If the poor have 10 units of health care and the wealthy have 100 units, that is bad. Only in the socialist's world is it better that everyone have 2 units. Neither the school system nor W apparently managed to teach Barbara this simple lesson in economics and civics.*

[*Socialism promises equality of outcomes for votes. It achieved that goal in North Korea and Cuba. It came quite close in Russia and Germany. It's had some setbacks in the UK, and its just beginning to flourish in the US.*]

In a century of socialism (insidious idealists/crooks) and 60 years of environmentalism (shrill empties) I've yet to see a stitch of progress freedom and free markets would not have delivered far quicker, massively more efficiently and with greater choice, quality and (economically) sustainably.

[*RSJ: Capitalism and socialism aren't headed in the same direction.*]

James says deregulation "didn't work" in finance. Yes it did. If the market was allowed to work. Namely if the participants were allowed to fail. But of course Gov't created Fanny Mae and Freddie Mac to underwrite 85% of US mortgages and now twice, each, they weren't allowed to fail. GM and Chrysler haven't been allowed to fail. Goldman Sachs hasn't been allowed to fail.

Forgive me but I can't see the deregulation for the amount of regulation, Gov't bailouts and warehouses full of regulations in the way!

Meanwhile zero regulation hedge funds, very similar in essence to banks, have had zero bailouts and are all still standing despite seismic recessionary impacts in their industry. The free market operates in many sectors (see small business) and goes through the birth, growth and death phases. Why not banks, automobiles, mortgages, healthcare, energy etc?

The free market (model) works, if you let it, because sloth gets left by the wayside as consumers, who have a choice, decide with their patronage. The Gov't never works because it is a monopoly structure. Without the free competitive market no organism is forced to progress. This is why the Gov't always delivers absolute garbage. Public sector output, like a private sector monopoly to be fair, produces uncompetitive, slow, inefficient crap.

The Gov't model, the public sector model, is broke. I know Dr G likes a little bit of Gov't but I don't believe in having even a little bit of stupid! We have freedom. We were born with it. Until politicians peddling "democracy" cons us into a Ponzi scheme called Gov't and chucks a warehouse full of laws and regulations at us and businesses like it's doing us some good.

[*RSJ: Ah, anarchy with its sweet smell of Utopia.*]

How's the US Gov't takeover of healthcare going? Here's an easy prediction from the Idiots Guide to Models that Don't Work: a monopoly (crap) force fed down consumers throats with no choice to go elsewhere with increasing cost, zero choice, slow progress, innovation and productivity (i.e., ever declining productivity).

That'll be just like State education, State police, State pensions, State climate science, State everything then!

> (QUOTE). Obama Begins "Lifestyle Health Modification" Program, Mandating Behavioural Changes Within US Society (by Zerohedge.com).
>
> At least initially, the 8 main verticals of focus will include: smoking cessation; proper nutrition; appropriate exercise; mental health; behavioral health; sedentary behavior; substance-use disorder; and domestic violence screenings. Eventually we fully anticipate that the program will also target such wholesome activities as screening for precious metal holdings, monthly minimum usage of available revolving credit (and a minimum threshold thereto) and the susceptibility of an individual to stay current on one's mortgage.
>
> (END QUOTE)

Obamaworld is right on track. Next stage, chips in your necks as they already have one on your bank account.

Link. http://tiny.cc/35dg0

[*RSJ: What is happening in the US is not just socialism, it's Marxism. All three tenets of Marxism according to my schema are ongoing: identity, governance, and citizenship.*

[*Identity: The Marxist divides the nation into classes and groups to create class warfare, and to foster envy among victims of a common enemy. White wealth vs. race, religion, sex, students, the poor, trade unions, movements, e.g., environmentalism, AGW. Western culture is individualism.*

[*Governance: The Marxist propaganda is to promise an oligarchy. In practice, it turns out to be an autocracy. In Marxism, the path was revolution, which is not reasonably available to Obama. His highest priority is not health care or the economy, the dollar or the oil spill. No, it's to convert about 12 million illegals from Mexico into democrat voters, and to keep the border open for an endless supply. These are enough votes for the Democrat to have won every presidency in modern times. Western culture is self-rule.*

[*Citizenship: In the Marxist society, the citizen has obligations to the state. To Marx, rights were bourgeois. Western culture preserves citizen's rights. Here is where we exchange freedom for serfdom, and with it, capitalism for socialism.*

[*Using these tenets as a check list, Obama meets all the requirements of an active Marxist.*]

Posted by John, Channel Isles | June 14, 2010 12:54 PM

John, Channel Isles wrote:

1006151223

"Anarchy" is the last straw of a failed argument those who support the idea (idealistic nonsense) of Gov't cling too. Here's some well known anti-Gov't anarchists;

- the birds

- Ocean Plankton

- ants

- migrating Bison and Wildebeest

- Sun Island, Maldives (Pop. 700 with zero Gov't) my last holiday island in March

Yep, what a load of "anarchists". The oceans plankton have managed their lives for millions of years without any Gov't. However did they manage it?

However did migrating Swallows for millions of years move from Africa to Europe without ever once setting up nonsense national borders and guarded by uniformed twats checking your Passports?

What seems to be missed by those wedded to their fagged-out ideas they need a politician and the garbage output of the public sector is that society (the 'Herd') has its own rules built-in as standard and goes on its merry social and economic way all by itself.

The free competitive market sorts out all commercial rules needed and delivers to consumers or they walk with their feet. No politicians, laws or regulations required as traded for centuries has proved.

Society works out its own rules of life too. We didn't have State police in Britain until 100 years ago. Until then there was a little rough stuff on occasion, you hired a thug for retribution, but in the vast majority we all just got on with it. No tossers, sorry politicians, required with their promise the States police force would resolve all issues. Which of course the State police don't. They neither prevent crime (impossible to do) nor do they solve crime. They're absolutely bloody useless like the rest of that garbage-bin for wasters, the State.

If the animals and birds can go on their merry way without need for politicians, why can't the human herd with vastly superior intelligence?

What has the State ever delivered but theft of our wealth and our freedom?

[*RSJ: This thread has wandered off into the inane. John seems to wonder how man differs from plankton, and other, low order life forms. He left out one of my favorites, slime mold. Or, he would suggest free markets might proceed like the birds, without fiat money or IOUs.*

[*We differ from the animals, of course, because of our brains and, according to some social theories, our opposable thumbs. These give us unique abilities to generalize, to communicate, to organize, and to create technology. And from all this came civilization and the realization that individual behavior ranges from helpful to hurtful, and that we didn't want behavior controlled as it is by the biggest and meanest and longest toothed chimpanzee. So we invented writing, which was especially helpful to God so that He could hand down His moral code, and laws and police, and tools and weapons, and judges and juries, and governments and capitalism. And at every point, we discovered what appears to be the same ratio of good guys to bad, though I'd give him that in politics the cream does seem to sink to the bottom.*

[*John, like all of us, finds himself powerless to perfect society, but, unlike the rest of us, John relishes ending civilization. Life is the ultimate reality show, and John is itching to get voted off the island.*]

Posted by John, Channel Isles | June 15, 2010 12:23 PM

Brian H wrote:

1007191444 ACQUIT

CO2 as driver, whether initiative or amplifying, has no mechanism for reversal -- i.e., cooling. Whatever initiates cooling is by definition in control of the entire system.

[*RSJ: I'm skeptical about your pair of statements, in particular about your reference to a definition. When my thermostat is set on heat, it regulates the temperature of my house adequately without the capacity to cool or to initiate cooling. That's because my house is in contact with a cold reservoir. You need to define your system first, including its connections to reservoirs and heat sources.*

[*Earth's climate has a major and a minor heat source, the Sun and internal heat, and a major and a minor heat sink, deep space and the*

deep ocean. In Earth's warm state, cloud albedo is the dominating regulator, a negative feedback. It happens to be bipolar, attenuating or amplifying insolation. However, it has no capacity to cool in the thermodynamic sense of extracting and dissipating heat, as modeled for refrigeration or evaporation. It cools in the ordinary language sense of reducing surface temperature.

[*IPCC's model suffers from having no regulating mechanism at all. Earth in its AGW model is delicately balanced, sitting on a "tipping point", ready to be knocked off into a runaway catastrophe with an arbitrarily small disturbance by humans. CO2 is the climatologists' mechanism of choice. It works through the physics of the "greenhouse effect", but amplified by water vapor because the CO2 itself proved inadequate to the task.*

[*IPCC's model, the radiative forcing paradigm, has no flow mechanism, and hence no feedback in the control system sense of a displacement, energy, information, or material from inside the system acting to modulate the system's input signals. So IPCC redefined feedback -- twice. To the Panel, feedback is a parameter calculated at run time, and distinguished from a forcing. Feedback to the panel is also a correlation between signals in a system instead of one of the essential control system types of feedbacks. See TAR, Figs. 7.4, 7.6, 7.7, & 7.8.*]

Posted by Brian H | July 19, 2010 2:44 PM

Brian H wrote:

1007191455 ACQUIT

The US' Founders struggled to constrain government to the absolute minimum possible. The Constitution consists mainly of restraints on what they (correctly) assumed would be inveterate tendencies to expansion and control of citizens. For that reason, it is anathema to socialists of all stripes.

[*RSJ: The US is in the throes not of creeping socialism, a failed economic theory, but of an aggressive Marxist take-over. Marxism is socialism in name but much more, involving anti-individualism, anti-freedom, and anti-self-government. Like all socialism, its appetite for subverting liberty is insatiable. Our freedoms of speech, of the press, of religion, of the right to enter contracts, to own property, to hire labor, to take risks, to spend, to sell, to waste, to save, to earn interest, not to conform, not to be tried twice, to hate, to educate our children, to travel, to be safe, and to vote and be represented lie somewhere between erosion and ruination.*

[*Marxism works by replacing the Western ideal of individualism with feuding classes and privileged groups, by replacing personal liberties with civil duties of conformance to the state ideal, and by replacing self-government with the promise of an oligarchy that in practice turns into a communist dictatorship. Evidence from Obama and the Democrat Congress, our one-party apparatus, is clear and unequivocal in all three realms: identity, governance, and citizenship.*

[*The Constitution has failed. It was not a struggle to constrain the power of government, but to minimize the Federal or central government, leaving the states to experiment. It was not a codifying of capitalism, but of defense of liberty, out of which capitalism was born.*

[*The people had a voice in only one half of one of the three bodies – the House. That has been compromised by what is tantamount to popular election of the President, and of both houses of Congress, and the infecting of the judicial branch with judges not in harmony with the law, but attuned to the popular and imagined will of the people and social justice. We are left with an over-powering central government, easily swayed by extra-Constitutional populist movements. We have no checks on power that might have been provided by federalism, or by petition, referendum, or initiative, and with ponderous mechanisms for Constitutional amendment and revision under control of the same ruling party.*

[*The US today is governed by two parties: a Marxist Party and a Bipartisan Party. The ruling party is taking over the economy, major chunk by major chunk, replacing deliberative regulation with unlimited, uncontestable, back-room, one-party rule-making. The power of the Marxist authority is soon to become entrenched by further locking the electoral college into a majority seeking mechanism, and by converting 10 to 15 million illegal aliens into Democrat voters, refreshed and engorged by a perpetually open border to the South.*

[*What you have observed just grazes the surface of the US crisis in government, but at that, it is far more than is appreciated by the Federal judgeship or the me-too opposition cowering in the Republican Party.*]

Posted by Brian H | July 19, 2010 2:55 PM

John, Channel Isles wrote:

1007230411

Steve McIntyre continues his amazingly persistent, detailed and thoroughly audited surgery of the AGW junk science and its vehicle, Government.

The 3 'investigations' by Gov't and its entities, East Anglia CRU, of its own AGW work have been typical of all and any Gov't process; a shambles; corrupt; incompetent; dishonest; a whitewash.

McIntyre is a diamond hard drill bit (a gem) amongst the scum of AGW snake oil salesmen.

'Blatant Misrepresentation by Muir Russell Panel'

http://tiny.cc/f9z6t

[*RSJ: The link supplied was not always successful. If it doesn't work, try this direct alternative:*

[http://climateaudit.org/2010/07/22/blatant-misrepresentation-by-muir-russell-panel/#more-11517

[*McIntyre's article criticizes the Muir Russell Report released on 7/7/10. It was commissioned by the University of East Anglia (UEA) to conduct an "independent review" of allegations arising from the purloined CRU emails, especially the charge of conspiracies to evade the UK's Freedom of Information Act (FOIA) and to abrogate the peer review process of professional climate journals. Previously on about 1/29/10, the UK's Information Commissioner's office had found from the same evidence that UEA had violated the FOIA. The Muir Russell had all the earmarks of being a whitewash, commissioned by the guilty party to rehabilitate itself from the Information Commissioner's determination. It didn't disappoint.*

[*On the same day as its release, Gavin Schmidt and Michael Mann happily celebrated the Muir Russell Report, saying*

> [The main issue is that they conclude that the rigour and honesty of the CRU scientists is not in doubt. For anyone who knows Phil Jones and his colleagues this comes as no surprise, and we are very pleased to have this proclaimed so vigorously. Secondly, they conclude that none of the emails cast doubt on the integrity and conclusions of the IPCC, again, something we have been saying since the beginning. **They also conclude as we did that there was no 'corruption' of the peer-review process.** …
>
> [All in all, none of the various accusations and insinuations that have been floating around the blogosphere have been sustained. Bold added.

[http://www.realclimate.org/index.php/archives/2010/07/the-muir-russell-report/

[*McIntyre needs no help in contesting the FOIA conclusions, and the Muir Report is irrelevant to the technical issues, saying*

> [It is important to note that we offer no opinion on the validity of their scientific work. Such an outcome could only come through the normal processes of scientific debate and not from the examination of e-mails or from a series of interviews about conduct.

[*RealClimate's "various accusations and insinuations that have been floating around the blogosphere" include that the AGW model is incompetent and that its promotion by CRU employees and their colleagues, as agents for the IPCC, promoted a scientific fraud to frighten the public and their governments, presumably for personal and institutional gain. The scientific charges are detailed in the several papers published in the **Journal**. Gavin Schmidt summarily and disdainfully dismissed the first paper, answered (finally) in the second paper. Otherwise, IPCC operatives almost never respond to public criticism of their work regardless that it is intended to frighten the public. **They hide behind peer review, as they define it and control it.***

[*The Muir Russell report mentions peer review 275 times, including the following:*

> [On peer review, we sought independent input (from the Editor of The Lancet [Richard Horton, MD]) on how the system works, to provide a context for our judgement. Id., p. 11.

[*Accordingly, Dr. Horton provided a detailed 6,800 word paper with 53 citations on peer review, appearing as Appendix 5 to the Report. The Report then provides a paid response comprising 680 words and 8 references, from one Elizabeth Wager, Publications Consultant, Chair of the Committee on Publication Ethics (COPE). Wager's opening sentence reads,*

> [Richard Horton suggests that 'If evidence has not been peer-reviewed, it is next to worthless'.

[*Her quote is precise but wrong. This is not Horton's personal view, but his characterization of Christopher Booker's strict view of peer review in science. Previously, Horton compactly summarized his view of peer review in just 89 words:*

> [The mistake, of course, is to have thought that peer review was any more than a crude means of discovering the acceptability - not the validity - of a new finding. Editors and scientists alike insist on the pivotal importance of peer review. We portray peer review to the public as a quasi-sacred process that helps to make science our most objective truth teller. But we know that the system of peer review is biased, unjust, unaccountable, incomplete, easily fixed [RSJ: jiggered, not repaired], often insulting, usually ignorant, occasionally foolish, and frequently wrong.
> http://www.mja.com.au/public/issues/172_04_210200/horton/horton.html .

[*Wikipedia had published this passage under "peer review", but it strangely disappeared.*

[*In her final paragraph, Wager says,*

> [Editors and publishers should continue to work hard to prevent and detect misconduct by authors, reviewers and editors and should have systems in place for responding appropriately when misconduct occurs.

[This is faithful to Horton's opinion, where he concluded,

> [There may be useful lessons here for the IPCC. Climate sceptics and climate scientists, along with their colleagues in other scientific disciplines, would likely welcome this greater rigour and scrutiny. It would certainly promote quality and strengthen accountability to a more critical public (and media) with higher expectations of science. More importantly, intensified post as well as pre publication review would put uncertainty – its extent and boundaries – at the centre of the peer review and publication

process.

[*The several members of the Muir Russell Panel should have familiarized themselves with Horton's views. Then they should have connected how the writers of the CRU emails conspired to suppress scientific skepticism and criticism through blatant abuse of the peer review process.*

[*Horton observed,*

> [Second, all young scientists should receive formal training – which they currently do not – in the standards and ethics expected in the peer review process (40). It is scandalous that peer review is simply not taken as seriously as it should be in the training of scientists. The result is that peer review is often idiosyncratic and sometimes unreliable, fuelling scientific controversies, such as that over climate science, rather than defusing those controversies. Strengthening the training, standards, and expectations around peer review would do much to make the quality of peer reviewing part of the formal appraisal of a scientist's contribution to his or her subject.

[*First, the idea that peer review is an essential element of the scientific method is peculiarly an academic view. Industrial science outpaces academic and government science, performing tasks in about a third the time, while employing about three times as many PhDs. It does so with a conspicuous absence from the realm of peer reviewed journals.*

[*The acid test of science is not the number or the quality of papers published, but in scientific models validated. A model with predictive power is necessary and sufficient, but not its publication in a companion paper nor its community acceptance.*

[*What is sorely missed among scientists, young and old, is not formal training in peer review, but in the precepts of science. What are missing from the journals are objective standards for acceptance of papers, free from dogma.*

[*The Muir Russell Panel instead endorses the academic view of peer review, concluding:*

> [On the allegations that there was subversion of the peer review or editorial process we find no evidence to substantiate this in the three instances examined in detail. On the basis of the independent work we commissioned (see Appendix 5) on the nature of peer review, we conclude that it is not uncommon for strongly opposed and robustly expressed positions to be taken up in heavily contested areas of science. We take the view that such behaviour does not in general threaten the integrity of peer review or publication. Id., p. 13.

[*The CRU members' conspiracy to subvert the peer review process was clear on its face. For further evidence, the Panel did not discover the many "contested areas" not published in peer review climate journals. Those contested areas were met by CRU's effort to downgrade and ostracize journals that published non-conforming articles. Finally, the Panel defends scientific skepticism as it might be an assault on peer review. The problem instead is the reverse: the manipulation of peer review to overcome skepticism.*

[*Next the panel urges that skepticism must be validated through the peer review process:*

> [The nature of scientific challenge. We note that much of the challenge to CRU's work has not always followed the conventional scientific method of checking and seeking to falsify conclusions or offering alternative hypotheses for peer review and publication. We believe this is necessary if science is to move on, and we hope that all those involved on all sides of the climate science debate will adopt this approach. Id., p. 14.

[*The Muir Russell Panel thus provides full support for CRU's actions to use peer review as a buttress for its doctrine against skepticism. It ignores Naomi Oreskes' findings in her much publicized article in which she found no skeptical articles among the 696 climate change papers published in peer-reviewed journals in the decade between 1993 and 2003.*

[*The Panel says,*

> [Handling the blogosphere and non traditional scientific dialogue. … [A] key issue is how scientists should be supported to explain their position, and how a public space can be created where these debates can be conducted on appropriate terms, where what is and is not uncertain can be recognised. Id., p. 15.

[*The Internet was initiated precisely for this purpose. DARPA created it to be a communications system for scientists to escape the grips of the suffocating peer review process. The signal-to-noise ratio on the Internet is abysmal, but not much worse than it is in any other medium. At that, it is superior to peer-reviewed journals that advocate for doctrines at the cost of ethics and the precepts of science. Regardless of the chaff, a wary reader can overwhelm himself in professional material from the Internet.*

[*The Muir Russell Report concludes,*

> [The rigorous development of scientific ideas leans heavily on peer-reviewed publication in scientific journals that are subject to testing and challenge by other, published, scientifically derived evidence. Id. p. 64.

[*On the grammar school multiple choice test on scientific literacy, this is a wrong answer. The correct answer is not a matter of dictum, but a simple matter of reason from an elementary foundation.*

[*One needs to know that science is a body of knowledge, and that its knowledge is contained in models of the real world, whether natural or manmade. Scientific models are not Tinkertoy representations of molecules, nor scale models of planets or airplanes. They are abstractions in natural language or symbols of a complex reality that lead to predictions for fresh observations. With this appreciation of models, the Muir Russell conclusion should have been:*

[*"The rigorous development of scientific ideas" consists solely of creating models with predictive power.*]

Posted by John, Channel Isles | July 23, 2010 4:11 AM

John, Channel Isles wrote:

100917054429

More news: not content with changing the scare story title from 'global warming' to 'climate change', the word smiths of politics want a new one, "Global Climate Disruption".

John Holdren, Obama's Science Czar, has been fretting the 'warming' bit wasn't working and 2nd attempt 'change' just ain't scary enough! So 'disruption' is the new trigger word to pulp the masses who according to surveys just don't give a monkeys for this Gov't propaganda (61% of Brits and over 70% of Yanks just ain't scared, despite nearly 2 decades of man-made Gov't and media hysteria).

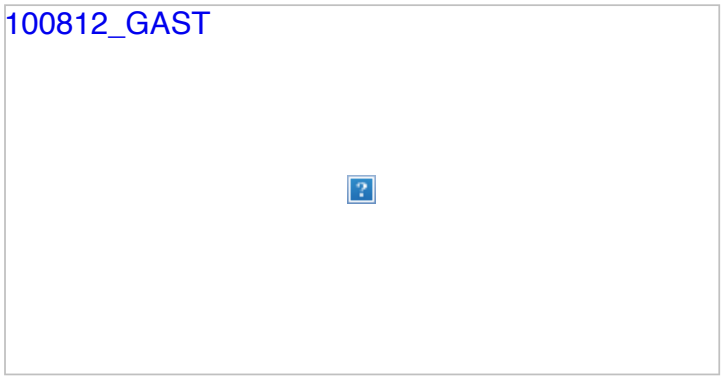
Link. http://tiny.cc/m4bg7

This comes as news the climate change bill, Cap & Trade (or Cap & Tax to you and me) has 'stalled'. According to a recent Dick Morris emailer I'm signed up to, the Cap & Trade Bill could barely muster 43 votes even amongst Democrats. So much for even the 'true-believers' of the left wanting to 'act urgently' to 'save the planet' from its imminent roasting eh?

So 'Global Climate Disruption' it is (for this week anyway) and IPCC name change to IPGCD presumably or maybe after the coming storm in a tea-cup of global political hot air imploding of Mexico it'll be IP-RIP !

[*RSJ: What's scary is John Holdren. He has co-authored some of the most obnoxious One-World/technocrat ideas, offensive to our Western ideals of individualism, civil rights, and self-government. For a nice summary with links to his book, Ecoscience, etc., see http://rayharvey.org/index.php/2010/09/obama-science-czar-john-holdren-global-warming-out-global-climate-disruption-in/ . He is every Marxist's friend, fitting right in with Obama and his staff.*

[*The left/warmists need to distance themselves from global warming because the public, unable to discriminate between weather and climate anyway, is aware that the climate has been cooling since 1995. Even NOAA's biased averaging now shows a decline over the past six years:*



NOAA Global Average Surface Temperature (GAST), 8/12/10
Figure 27

http://www.ncdc.noaa.gov/cmb-faq/anomalies.html

[*Compare Figure 27 with the corresponding background used in **SGW**, Figure 1. The apparent major difference, the flattening or decline for the past six years, was predicted by the **RSJ** Sun reduction four months before NOAA published its revision.*]

[*That a prediction was better than the smoothed data, even in this small way, may be unprecedented in science. It comes about in part because the climatologists smooth with unrealizable filters, also called non-causal filters. These filters look into the future, and put the investigator on the guess as to how to treat the end-points. The result is subjective, and outside science. In the case of the GAST record, the guess was wrong. The solar model is causal.*]

[*Even though the recent decade of decline in surface temperatures is not quite up to making the transition from weather to climate, IPCC's model predicted a rise. All its ingredients for a rise are in place and functioning. The data had showed a recent rise, which NOAA has just retracted. This is a technical and PR embarrassment, warranting a name change, even to a poor name lacking any pizzazz and inviting ridicule. It's political nonsense on a par with AGW, a cover-up disguised as science.*]

Posted by John, Channel Isles | September 17, 2010 5:44 AM

John, Channel Isles wrote:

1010110925

In good scientific tradition Professor Harold Lewis has nailed his resignation to the door of the American Physical Society (APS). Mr. Lewis, Emeritus Professor of Physics at the University of California, Santa Barbara, and a veteran of upholding the independence of science has thrown in the towel accusing the APS of selling their souls to (Gov't) money.

He says he is ashamed at the "global warming scam, with the (literally) trillions of dollars driving it, that has corrupted so many scientists, and has carried APS before it like a rogue wave. It is the greatest and most successful pseudoscientific fraud I have seen in my long life as a physicist. Anyone who has the faintest doubt that this is so should force himself to read the ClimateGate documents, which lay it bare. … [¶] So what has the APS, as an organization, done in the face of this challenge? It has accepted the corruption as the norm, and gone along with it."

Link. http://tiny.cc/slvez

Meanwhile the Russian weather forecasting unit Fobos predicts this to be the worse winter to come in 1,000 years. Worse than last years which nearly froze out Obama's maiden speech, stopped Nancy Pelosi's plane from reaching a global warming rally, saw snow in Buenos Aires, Beijing and Baghdad (so rare the Iraq's haven't a word for the white stuff!) [*Thalj doesn't work for you?*] and caught the Copenhagen GW conference in a big chill.

Link. http://tiny.cc/0eunz

The Russians weather forecast is for Europe but I wonder if the big freeze and let's face it the declining research money from cash-strapped Gov'ts to keep funded this 'Global BS' will reach Mexico in November?

[*RSJ: Professor said that 67 years ago when he first joined the APS, it was "as yet uncorrupted by the flood of money". He then discussed changes in the practice of physics, influenced by money, which as recently as 35 years ago had not affected the independence of APS. "How different it is now", he says, introducing the passage quoted by John about the global warming scam.*

[*Then Prof. Lewis added a "conjecture" to explain APS's bizarre endorsement of the scam. This was all in his letter of resignation addressed to Curtis G. Callan, Jr., Princeton University, and President of the APS. Lewis said, "I think it is the money… . Your own physics Department (of which you are chairman) would lose millions a year if the global warming bubble burst." Lewis's conjecture is that large funds which flow into the Princeton Physics Department influences Prof. Callan, who as President of the APS influences the Society's policies.*

[*The official response from the APS Press Secretary can be seen at*

http://www.aps.org/about/pressreleases/haroldlewis.cfm

[*APS says, "There is no truth to Dr. Lewis' assertion that APS policy statements are driven by financial gain." That is not what Dr. Lewis said.*

[*Elaborating, APS says,*

> [Dr. Lewis' specific charge that APS as an organization is benefitting [sic] financially from climate change funding is equally false. Neither the operating officers nor the elected leaders of the Society have a monetary stake in such funding. Moreover, relatively few APS members conduct climate change research, and therefore the vast majority of the Society's members derive no personal benefit from such research support.

[*This is all supposed to be in the letter of resignation. It is not to be found there.*

[*According to Lewis, APS had an established procedure for creating Topical Groups by which the members could investigate a scientific issue. Lewis accused the APS of ignoring a petition by over 200 members for a TG on Climate Science, and further that APS had a policy in force that made collecting signatures for a petition difficult. To APS' credit, it responded, stating that it is now in the process of organizing such a group. It should be called the Harold Lewis Group on Climate Science.*

[*Lewis complained explicitly about APS' policy statement being poisoned by its retention of its claim that the science was "incontrovertible". That unscientific term did not survive in the APS response even to be answered. APS now says,*

> [On the matter of global climate change, APS notes that virtually all reputable scientists agree with the following observations:
>
> [• Carbon dioxide is increasing in the atmosphere due to human activity;
>
> [• Carbon dioxide is an excellent infrared absorber, and therefore, its increasing presence in the atmosphere contributes to global warming; and
>
> [• The dwell time of carbon dioxide in the atmosphere is hundreds of years.

[*APS simply replaced incontrovertible with "all reputable scientists". What APS is saying is that a scientist is reputable according to whether he endorses the APS official, three-pronged carbon cycle dogma of Anthropogenic Global Warming.*

[*By relying on an imaginary and irrelevant scientific consensus, APS preempts science to rely on three false and misleading statements. The reasons, while all found in the* ***Journal*** *articles, are worth making explicit.*

[*(1) That atmospheric CO2 is increasing due to human activity is valid in a restricted context, it is otherwise false and misleading. Atmospheric CO2 is increasing because Earth is currently warming in recovery from the last Ice Age and the Little Ice Age. The laws of solubility -- laws which are solidly in the APS domain -- are sufficient to account for 94% of the atmospheric increase in CO2 as a result of ocean warming. The other 6% is attributable to human activity. What is needed is a mass flow analysis – a method well within physics – and which IPCC neither published nor offered in support.*

[*(2) CO2 absorbs infrared radiation, but that it might be an "excellent infrared absorber" without quantification is subjective, and hence no part of science. Consequently, it is inappropriate in an APS statement. While the proposition that increasing atmospheric CO2 contributes to global warming may again be true in some restricted sense, it is false and misleading as an unrestricted scientific proposition. The Sun causes the observed global warming, amplified and regulated by cloud albedo, and collected and distributed by the ocean. The changes in atmospheric CO2 concentration are in theory positive with respect to climate warming, but in practice immeasurably small.*

[*The phrasing of* increasing CO2 attached to "global warming" implies an on-going cause-and-effect process that is false. In the popular media, global warming misleadingly means anthropogenic global warming, but Earth is currently in an on-going, natural warming epoch that has been underway for over 20 millennia, and has yet to achieve the peak reached in the four similar ages going back a half million years.

[*How CO2 absorbs infrared radiation is governed by the Beer–Lambert Law -- another law explicitly in the domain of the APS. That Law shows that the effects of a gas absorber diminish as the concentration increases. It is not a perpetually increasing effect as APS's simple statement suggests. In order to determine how much radiation an increase in CO2 absorbs, the Law requires a determination of where the atmosphere is on an absorption curve. The IPCC never made that determination, preferring to model infrared absorption falsely as dependent on the logarithm of the atmospheric CO2 concentration, a dependence that never saturates.*

[*(3) The claim that the "dwell time of carbon dioxide in the atmosphere is hundreds of years" is false. IPCC provides a formula for the residence time of CO2, a formula that is analogous model for the filling of a leaking bucket -- a phenomenon analyzed in first year high school physics, and yet a third concept precisely in the domain of physics and the APS. That formula, stated but never employed by the IPCC, shows that the mean residence time is between about 1.5 and 5 years.*

[*APS statement is incompetent, and shows a lack of understanding of fundamental concepts of science. The Society has uncritically lifted portions of a particular failed climate model proclaimed by its creators to be valid by consensus. Instead, APS's own lofty Mission Statement first states it is to*

> Be the leading voice for physics and an authoritative source of physics information for the advancement of physics and the benefit of humanity;

http://www.aps.org/membership/units/handbook/convocation/upload/guidingprin10.pdf

[*APS has embarrassed itself and dishonored its self-imposed public duties.*

[*Harold Lewis is clear that he does not subscribe to the AGW model, however he bases his resignation from APS on procedural abuses and overarching matters of the general practice of science. Included is the notion APS shared of incontrovertible science, which is a corollary of science by consensus. Lewis might have included that the climate model which makes CO2 a causative agent of warming, a model which at one time was a conjecture, is no longer scientifically valid. Climatologists in the IPCC camp use this model for public policy without ever subjecting it to the scientific rigor of validation, advancing it from conjecture to hypothesis and to theory. This is unethical, and APS shares in the culpability.*

[*As important as Harold Lewis's resignation is, his action is not substantive for the anti-AGW model that the Sun causes Earth's warming, and that that warming releases the CO2 into the atmosphere. The failure of the AGW model is extrinsic to his resignation rationale.*

[*Two other critics of AGW are in the limelight today, critics who damage the science they claim to serve. One is Bjørn Lomborg, a PhD political scientist, and the self-proclaimed Skeptical Environmentalist, who champions not at all that AGW is erroneous, but that many more worthy causes exist for the money which might be wasted on the climate cause. At the outset, Lomborg concedes that AGW is valid to prioritize social causes as he sees them. "Several billion people will be affected by global warming", by which he means manmade climate change. What Lomborg is prioritizing is money spent on fictitious solutions to fictitious problems. We have the technology neither to stop disease, hunger, death, nor climate.*

[*Next on the media horizon is a paper by Dr. Horst Borchert. It is not yet available in English, but the abstract is, shown in full:*

> [It was found that the South Pacific Oscillation (SO) is influenced by solar activity, similar to the North Atlantic Oscillation (NAO). Especially during the warming period from 1980 to 2009 the oscillation of solar wind – Index "aa" – was in good resonance with the delayed South Pacific Oscillation. The same observation was found between the oscillation of cosmic radiation, which is controlled by Forbush– reduction by the magnetic fields of the sun protons of the solar wind and the delayed SO (K=0.8). The consequence of these observations is the postulation that the increase of global temperature in the Southern Hemisphere was caused by solar activity with strong emissions of proton-rays in the Earth 's direction during the 22nd and 23rd sunspot-periods, reducing cosmic rays. This led to a reduction of cloudiness, increased solar rays and warming up the lower atmosphere (Svensmark Effect). As a consequence, dissolved CO2 was continuously emitted by the slowly warming ocean, providing fertilizer for the flora of the world. A relevance of CO2 concerning climate change could not be found. With the end of solar

> activity in 2006, a cold weather period has also started in the Southern Hemisphere.

[*The problems with the Borchert model lie in its foundation in physics. He fails to link his parameters to the global average temperature. The SO includes the infamous El Niño and La Niña effects, and as he reports, the "global temperature in the Southern Hemisphere". As large as these effects are, they are nonetheless regional. The SO affects weather. It accompanies changes in the global distribution of thermal energy and humidity, but it is not known to have any effect on heat. It is neither a source nor a sink for heat, nor does it influence heat from the Sun nor to deep space. The Sun warms Earth on a scale of centuries, and is unlikely to be significant within the few decades on which Borchert relies (1980 to 2009, the 22nd and 23rd sunspot periods, and much less since 2006).*

[*Svensmark showed a correlation supporting a model that galactic cosmic rays, modulated by solar activity, affect cloudiness. As explained by IPCC,*

> [Svensmark … found an increase in cloudiness of 3 to 4% from solar maximum to minimum and speculated that (a) increased GCR flux causes an increase in total cloud and that (b) the increase in total cloud causes a cooling of climate. …
>
> [We conclude that mechanisms for the amplification of solar forcing are not well established. … At present there is insufficient evidence to confirm that cloud cover responds to solar variability." TAR, ¶6.11.2.2, pp. 384-5.

[*As shown in the **Journal** article **SGW**, solar activity predicts global average surface temperature over an unprecedented interval and with an accuracy unprecedented in climatology. Because the variability of the total solar flux is small, an amplifying mechanism is necessary to account for the evidence. The obvious choice is cloud cover or cloud albedo, which is the most powerful feedback in all of climate because it shutters the Sun. Cloud albedo exerts a feedback omitted from IPCC models, positive with respect to solar variability, and negative with respect to surface temperature.*

[*Cloud effects are obvious. Cloud burn-off is an everyday phenomenon, and one found studied for airport operations. The reverse effect, the condensation of water vapor into clouds, is equally familiar and well-modeled. Cloudiness, including fog, is a humidity-dependent part of weather forecasting, one exhibiting some modest accuracy, and all without reliance on the subtleties of Svensmark, a low order effect involving CCN concentration, GCR intensity, and solar activity, parameters idled by weathermen. Furthermore, the definition of climate as a minimum covers about three solar cycles, and considering Earth's response to the best model for the Sun, a better climate span might be a dozen solar cycles. Variations on the order of a few solar cycles or less will not be sustained as climate.*

[*In short, Borchert, like Lewis and Lomborg, aid the AGW fraud, a vicious hoax endorsed by APS, by assuming an inadequate anti-AGW model, one incomplete, one metaphysical, and one concessionary, each with respect to the substantive, first order facts of climate. (1) The Sun liquefies Earth's surface water. (2) Variations in solar activity cause the variations observed in Earth's average surface temperature. (3) Earth's average surface temperature determines its atmospheric carbon dioxide concentration, which in a minor and limited way helps water vapor blanket the Earth against heat loss to deep space. And (4) Earth's cloud cover regulates Earth's climate, amplifying short term solar variations, but mitigating any long term warming.*

[*As for the Ruskies, why would anyone give a moment's thought to their climate model? Does anyone think that they have not committed the same published, peer-reviewed, fatal errors that infect IPCC models?*]

Posted by John, Channel Isles | October 11, 2010 9:25 AM

John, Channel Isles wrote:

101115125542

It appears Carbon is not quite fetching the fanciful prices Lord Stern estimated on the Chicago Mercantile Exchange. Latest prices on Carbon is 5 Cents a Ton as trading collapsed last week.

http://wattsupwiththat.com/2010/11/08/public-carbon-trading-dead-in-the-usa/

That'll be sad new for Obama's Chicago buddy who set up this scam and no doubt Al Gore who has a lot of green money invested in this economic and scientific fraud.

And even sadder news for that benign charity, the World Wildlife Fund (WWF), which had eyes on $60 Billion of our money handed out for doing nothing (the ultimate socialist Nirvana).

http://www.telegraph.co.uk/comment/columnists/christopherbooker/7488629/WWF-hopes-to-find-60-billion-growing-on-trees.html

[*RSJ: Exactly why did the economic hoax, designed to evade regulation of the CO2 hoax, fail? The ignorance in the environmental and climatology movements is eclipsed only by government. My first thought was reading this stuff was like listening to noise, but then that is actually being practiced by SETI, the Search for Extraterrestrial Intelligence. I suppose that is justified because the Search for Terrestrial Intelligence fails so often.*]

So Cap & Tax, sorry 'Trade', is dead because Obama's socialists can't be arsed [*RSJ: to arse: to be bothered.*] in enough numbers to save the world. And now Carbon Trading has collapsed due to the 'uncertainty' of political will post-Republican election victories.

As I said it always was a political beast and only a political bullet, rather than a scientific one, was going to kill pile of bull.

[*RSJ: In spite of a few brief moments of sanity, Cap & Trade is proceeding in the US by presidential edict, enacted through EPA*

regulations. The 112th Congress won't be able to pull EPA's teeth, except in the most improbable event that both Obama and the Senate agree. The House will probably try to defund EPA, which it can do all by itself.

[*So defanging EPA is an action item for the 113th Congress. Unfortunately, inflation and her daughter, real interest rates, already set in motion through deficit spending masked by quantitative easing, are likely to manifest themselves during the 112th term, and the GOP is all queued up to take a Carter-like walk on the plank for a redo of his two-pronged economic bust. Carter never knew what hit him, and the Republicans show no better economic acumen to prepare a defense.*]

Posted by John, Channel Isles | November 15, 2010 12:55 PM

John, Channel Isles wrote:

101118155505

> The Fed, Bank of England and ECB's 'Quantitative Easing' explained;
>
> http://www.zerohedge.com/article/quantitative-easing-explained-0

[*RSJ: Clever little unauthoritative cartoon video produced anonymously via xtranormal.com.*]

The Wizard of Oz, Ben Bernanke, huffing and puffing behind the curtain wants inflation (at 2% per annum). He will of course get what all parts of Gov't with a stated policy objective will get, the exact opposite of their policy target, deflation.

[*RSJ: Here's a news alert from the Wall Street Journal two days ago (the 23rd):*

> [Minutes of the Fed's latest policy-setting meeting Nov. 2-3, released with the customary lag Tuesday, showed officials expect the economy to grow at a moderate pace next year, with unemployment staying disappointingly high and inflation uncomfortably low.

[*What the Fed means, of course, is that the CPI rate of increase is too low. That's because the inflation is in place, and accelerating, but it isn't being reflected in the CPI because the velocity of money is too low, and that's because the economy isn't responding to a "spending stimulus". Solution: expand the money supply more.*

[*Our central bank is dutifully setting aside its independence to cooperate with our Marxist government, masking its wild deficit spending by expanding the money supply through an on-going massive buy-down of US treasuries, now called quantitative easing. If only spending were an economic stimulus! The hope of our government is what Lord Keynes taught them: inflation is a stimulus.*

[*What the Fed is trying to do is invoke a tax increase, the monetary tax increase of inflation. Obama's first objective is to spend, and his second is to redistribute income, domestically by increasing the "progressiveness" of federal taxes, and internationally by imposing Cap & Trade. To the Democrats, the economy will recover by itself (it always has), and, if necessary, given a little boost from the FRB. The Fed's monetary tax is what the liberals call regressive. They don't even know they are not on the same page.*

[*The Debt Commission just released a preliminary report with a vast assortment of horrors, offset by some fanciful reductions in tax rates. What they left out was the liberals cure: trivialize the debt with inflation.*

[*John is on yet another page. He writes often about deflation, thinking somehow that the result of increasing the money supply might be to decrease the money supply, the necessary prerequisite to deflation. To be more generous, John believes that a fall in prices is deflation. We've discussed it often, and John's own authorities, who confuse price trends with inflation and deflation, warn not to do that. As shown below, John agrees with Bernanke.*

[*Back to the cartoon, it says,*

[Raccoon-eyed girl: Why do they call it quantitative easing? Why don't they just call it printing money?

[Raccoon-eyed boy: Because the printing money is the last refuge of failed economic empires and banana republics, and the Fed doesn't want to admit that this is their only idea.

[*The difference between printing money and QE is that in the latter records and receipts are kept, e.g., treasuries held by the Fed, eventually to be sold back into the market when the market for them is up. The Carter economic crisis was caused by the termination of QE followed quickly by the Fed dumping its holdings into the market. The bottled up price inflation and the overload of the market caused interest rates to erupt, and the end to negative real interest rates.*

[*Continuing with the cartoon, it's little animals say,*

> [Girl: So why do they want to print money?
>
> [Boy: Because they say we have the deflation, and the deflation is very bad.
>
> [Girl: What is the deflation?
>
> [Boy: The deflation is when the prices of the things we buy go down.

[*The boy raccoon continues to link prices to the CPI and to say during a recession "the Fed would rather have the inflation." He links Ben Bernanke to the Fed, and presumably this Fed policy. "According to the Ben Bernank', the inflation will create the jobs and improve the housing market."*

[*Bernanke gave a definition of deflation in a talk before the National Economists Club on 11/21/02. He said it was a general rise in prices. I wonder if any real economists were in the audience to cringe at that populist distortion of economics. In July, '03, Bernanke said,*

> [Even if the economy recovers smartly for the rest of this year and the next, the ongoing slack in the economy may still lead to continuing disinflation.
>
> http://www.highbeam.com/doc/1P2-6961279.html

[*Since he conflates the economic terms of* inflation *and* deflation *with a rise or fall in prices, respectively, he needs to invent the new word,* disinflation, for whatever it is that he might be thinking about.

[*He also said,*

> [Economists of various stripes have argued that inflation is the inevitable result of (pick your favorite) the abandonment of metallic monetary standards, a lack of fiscal discipline, shocks to the price of oil and other commodities, struggles over the distribution of income, excessive money creation, self-confirming inflation expectations, an "inflation bias" in the policies of central banks, and still others.
>
> […
>
> [So, is deflation a threat to the economic health of the United States? Not to leave you in suspense, I believe that the chance of significant deflation in the United States in the foreseeable future is extremely small, for two principal reasons. The first is the resilience and structural stability of the U.S. economy itself. Over the years, the U.S. economy has shown a remarkable ability to absorb shocks of all kinds, to recover, and to continue to grow. Flexible and efficient markets for labor and capital, an entrepreneurial tradition, and a general willingness to tolerate and even embrace technological and economic change all contribute to this resiliency. A particularly important protective factor in the current environment is the strength of our financial system: Despite the adverse shocks of the past year, our banking system remains healthy and well-regulated, and firm and household balance sheets are for the most part in good shape. Also helpful is that inflation has recently been not only low but quite stable, with one result being that inflation expectations seem well anchored.
>
> […
>
> [The sources of deflation are not a mystery. Deflation is in almost all cases a side effect of a collapse of aggregate demand--a drop in spending so severe that producers must cut prices on an ongoing basis in order to find buyers.

[*That in 2002.*

[*Clearly Bernanke is not a monaterist, yet he is in charge of US monetary policy! He does not understand definitions to work within them, and ignores useful definitions of inflation and deflation to rely on a price definition. As the cartoonist said, his position is probably because of his beard.*

[*Now in case that is not enough, consider that Bernanke is trying to effect inflation by expanding the money supply! He might THINK he's controlling aggregate demand, but he doesn't have a control lever for that. He IS controlling interest rates because, unless he has a one digit IQ, he intervenes in the treasury auctions only when the price gets high enough. He talks like a fiscalist, but walks like a monaterist. Our leader might as well be drunk. If not, heavy drink is my prescription.*

Posted by John, Channel Isles | November 18, 2010 1:55 PM

Anonymous wrote:

101202151913

> Thank you for the replies Dr. G.
>
> I'll respond this weekend. In the meantime here's the latest European weather report:
>
> Warsaw, Poland -18 (Nov Av Temp 0 Degrees)
>
> Berlin, Germany -12 (Nov Av Temp +2 Degrees)
>
> Munich, Germany -17 (Nov Av Temp 0 Degrees)
>
> Prague, Czech Rep -13 (Nov Av Temp 0 Degrees)
>
> London, England -3 (Nov Av Temp +5 Degrees)

We're some way from the UN IPCC's 2 Degrees warmer predictions and indeed at opposite poles so-to-speak being just a little -8 to -18 Degrees on the frosty side of their global climate computer predictions.

[*RSJ: And we have a deep chill in Washington, DC of a completely different variety.*

[*Put aside all the elaborate computer models, and look at the Vostok record. We're still 1ºC to 3ºC shy of the five almost periodic highs of the last half million years. See Figure 1, above, where today is on the left. We might not be achieving that high, and Earth may be ready for another slow drift into a deep, prolonged ice age, due to drop about 10ºC in 100,000 years. I'd wager that technology will be different by then. And I'll bet that Yellowstone will blow long before that.*]

And that's come as somewhat of a shock, for the 10th year in a row no less, to the absolute geniuses of weather forecasting at the UK Met (also famous for IPCC forecasting). So how does the UK Met rationalise being wrong 10 years in a row, getting snow when we should be getting mild, and just the little matter of being not 1 or 2 degrees out, but double digit Degrees far from reality???

> >>Dr. Vicky Pope – the Göbbels and Iraqi Information Minister of the UK Met Office - puts this current freezing weather down to "climate variability", saying our senses are deceiving us. If you look at the long term trends, we are in fact experiencing fewer freezing winters and more heatwaves, she says.

Link. http://tinyurl.com/2wjux9n

[*RSJ: The link translates to*

[http://eureferendum.blogspot.com/2010/12/were-they-misled-by-met-office.html

[*with an extra h at the beginning. Delete one h, and it connects.*

[*Preposterously, IPCC and its believers go even further, saying something like this: "Warming, did I say warming? It's variability! CO2 will create greater weather variability. Greater highs and greater lows. More precipitation and more drought."*

[*Unfortunately, this reference does not actually cite anything Pope wrote. It could be just the writer's interpretation that she was talking to "us", the public.*]

As mentioned before Britain grinds to a halt at precisely 0 Degrees Centigrade. The UK Met advises local Gov't on weather forecasts and for 10 years on the trot they've predicted "mild warm winters". Hence no Gov't gritting prepared for the roads causing both economic and logistical waste our socialist bankrupt economy can ill afford.

The UK Met's laser accurate Dr. North reminded us as late as October we should expect an "unusually dry and mild winter". It's all gone a little pear-shaped for Dr. North as tomorrow all forms of the UK's decaying Gov't regulated or managed transport systems are in absolute chaos with London seeing -12, a whopping 15 to 20 Degrees from the December norm. Over to James Delingpole at the Telegraph to compliment Dr. North on his staggering accuracy:

Link. http://tinyurl.com/374oc7q

[*RSJ: Here James Delingpole says,*

> [Why then, does the government go on relying on the services of this risible outfit? How come when the Met Office's spokeswoman Vicky Pope pops up yet again to reassure us that this Siberian winter is a case of "weather not climate" does anyone still take her seriously?

[*Pope's caution is misguided. The problem at hand is not a conflict between weather and climate, but between weather and weather forecasts. To the extent that her clarification is directed to the public, it is also misdirected. It should be addressed to her weather counterparts at the Met Office (she resides on the climate side) who have allowed her imaginative, unscientific climate modeling to infect their very serious weather forecasting. The two paths should be beyond arm's length.*

Honestly you couldn't make this stuff/crap up. Here's the UK Mets resident weather-Einstein, Dr. David Viner, back in March 2000 with predictions for the next 10 years of "Snowfalls are now just a thing of the past" and "Children just aren't going to know what snow is!".

Link. http://tinyurl.com/yz8urac

Love the children angle don't you, really pulls on those heart strings. But Dr. Viner doesn't let the gravy train get in the way of his unquestionable scientific integrity No Siree. He has a nice cushy public sector job distributing £10m of taxpayers wealth on the British Council to "raise awareness of global warming among young people abroad". There's that kiddies angle again, a favourite 'angle' of socialists and Göbbels the Nazi propagandist too.

I never realised indoctrinating young foreign kids with scientific and financial fraud was a 'mandate' given the British Government by the public or that shovelling rot down kids throats could be so expensive!!

More on the money trail from James at the Telegraph which makes you pleased they're not in the pocket of 'Big Oil' doesn't it?!!!

Link. http://tinyurl.com/2vhfz3t

I hear it's a bit cold across the pond too Dr. G. And just South of you attendance for the 'Big Green' event at Cancun, Mexico is down 40% compared to Cop-out-hagen.

[*RSJ: From the Guardian:*

> [Snow irony
>
> [Vicky Pope, head of the climate predictions programme at the Met Office's Hadley Centre, was stuck at Gatwick airport this week, a victim of Britain's brutal cold snap. Ironically, she was on her way to Cancún to announce, together with the UN's World Meteorological Organisation, that 2010 had provisionally tied with 1998 as the hottest year on record. Scientists from the Noaaa and Nasa, the two other institutes that provide data on global temperatures were wisely staying put in the US, having already stated that it looked like being the hottest year ever.

http://www.guardian.co.uk/environment/2010/dec/03/cancun-climate-change-summit-zapatistas

There's a 50% reduction in ICE staff attendance too who paid a cool $622m for the now imploded Chicago Carbon Trading Exchange (CCX) barely a few months before the price collapsed. Obamas Ponzi, sorry buddy, Richard Sandor, took home a carbon sequestrated $93m from the sale of CCX to ICE, the 'spoils' of saving the Earth and educating the children on why only socialists have everyones best interests at heart.

http://www.reuters.com/article/idUSLDE6791WI20100812

Happy Christmas to Socialists everywhere. The world is a far far better place for your wisdom, selfless giving and indocrination of other peoples children.

[*RSJ: Dr. Vicky Pope's comments were of special interest since highly placed individuals in the AGW program rarely speak, and since she may have insight into how IPCC models are going to change for IPCC's upcoming Fifth Assessment Report (AR5). According to the Met Office, its Hadley Centre is*

> [one of the world's leading centres for climate change research, our scientists make significant contributions to peer-reviewed literature and to a variety of climate change reports, including the Assessment Report of the IPCC. Our climate projections were the basis for the Stern Review on the Economics of Climate Change.

[*For an extensive analysis of the Stern Review, see comments to John, Channel Isles, 1/9/10, above (code 1001091131). In looking for that analysis, I discovered that Google does not cover that comment, the one preceding it, and, by sampling, none subsequent! Is this a temporary Goggle problem?*

[*No recent papers by Pope or Hadley Centre popped up in a Google search, but I did discover a recorded interview with John Humphrys on BBC from 11/26/10.*

[http://news.bbc.co.uk/today/hi/today/newsid_9231000/9231192.stm

[*Unable to find a transcript, I made one:*

> [Humphrys: [If you've been spending] half the morning scraping ice off the windscreen or fighting through the snow to get to work, you may not appreciate what I'm about to tell you. This is shaping up to be the hottest year on record, possibly the second hottest. That is what the Met Office says in a report out today. They go on to say we may be underestimating the rate of global warming.
>
> [Dr. Vicky Pope is head of climate change in the Met Office. Good morning to you.
>
> [Pope: Good morning.
>
> [H: Which puzzles me a bit because I see from the report that you say that in the last 10 years the rate of warming has, and I take it you mean by that the speed of warming, has decreased.
>
> [P: That's right. We've been comparing what's happening over the long term, which is the best way to look at weather, what's happening with global warming. So in the long term, we've seen an increase of about 0.16 degrees per decade, …
>
> [H: Hang on, what's the long term?
>
> [P: That's over the last 30 years …
>
> [H: Right
>
> [P: 50 years. But if we look in the last 10 years, we see that's decreased very slightly, somewhere between 0.05 and 0.13 degrees per decade …
>
> [H: Well, that's good, isn't it.
>
> [P: Still warming. So what that's, what we don't, now then need to look at is while that's happening is it because global warming has decreased, and that's actually going to be sustained, or is it because of other things that are happening on much shorter time scales. And it looks as though it's because of those other things. So the natural variations that you get in climate could account for all of that slowdown.
>
> [H: On the other hand, it could be that the rate has slowed down and it'll continue to slow down. You can't actually show that can you?
>
> [P: Even in uh, but where we have model projections where we look at what happens when you increase greenhouse gases, you

have global warming. About one in, decade in every eight sees a slow down or even stopping of the warming. So you get long term warming, but you get this one decade in every eight where you get slowdown. So it's entirely consistent with that. But the other thing that we've shown is that we've been looking in more detail at the observations that go into that record, and the type of observations has changed slightly in the last 10 years. So the number of drifting buoys is actually increased …

[H: So the number of drifting buoys …

[P: That's right. These are sort of, buoys that sit in the ocean, they, … You launch them and then you leave them there, and they measure the temperature. So we've, there's more of those in the ocean and fewer of the ships are actually observing temperature than they used to in the past. And the relative temperatures from these two observing systems is slightly different, and it turns out that buoys are a little bit cooler. So because we've got more of those now, we're actually underestimating the warming that's happened in the last 10 years.

[Another factor is actually that we've got information that the Arctic is warming up more quickly than other parts of the world, and in fact there are fewer observations in the Arctic for obvious reasons – not very many people live there. And so actually we're underestimating the warming in the Arctic. So again if we were able to get a better measure of that warming we would probably find that the rate of warming was actually a bit faster (unintelligible) …

[H: Or it might show you the opposite,.

[P: No …

[H: … you can't be sure. I mean if what you're doing is an awful lot of computer modeling here and projecting, it could be that you simply got it wrong. The trouble is people are a bit skeptical now, for reasons that you fully, well understand, that where, uh, we uh, you know, the notorious, well what we were told that the glaciers were all going to disappear turned out to be rubbish. I mean, there is skepticism out there.

[P: Well this has not, nothing to do with models. It's all to do with observations. So we're able to, by comparing, we've got observations, simultaneous observations from lots of different sources, and by comparing those we can look at the relative ways that these different systems observe, and so we can correct for any differences between the different systems. And that's what we're doing here.

[With regard to the Arctic, we do of course have some measurements in the Arctic and from those we know that, that, that's evidence of warming. And we also have satellite measurements, which again tell us that there's more warming in the Arctic.

[H: And have, you can be absolutely certain that this is the result of manmade global warming, us putting CO2 in the atmosphere, and not something to, for instance, with the Sun?

[P: Well, the, so the long term warming that's, it's very likely to manmade global emissions.

[H: Very likely, you can't be sure about that?

[P: It's greater than 90% chance, which, um …

[H: And not sunspots or whatever is going on on the Sun?

[P: The solar cycle of course does affect climates, and when you look on millennia time scales it does have an impact. We've, that's factored into our calculations and the what, the solar cycle over the sorts of time scales we're looking at over decades is actually an 11 year cycle so we get this up and down in the solar cycle, and that's, contributes around about 0.1 degrees to global mean temperature changes. And we have seen actually part of the decrease in the last 10 years is because we've had a minimum in the sunspot cycle and the, which lasts a bit longer than normal and so in fact that depressing the temperatures as well for right …

[H: … factor into that I'm afraid. Dr. Vicky Pope thanks very much indeed.

[*IPCC defines climate "as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years." FAQ 1.1, p. 94; AR4, Glossary, p. 942. Its Assessment Reports discuss climate variability at length, usually due to the Southern Oscillation, including El Niño and La Niña, and the Northern Oscillation, but I found no instance where climate models predict these events. IPCC has an explanation: "The chaotic nature of weather makes in unpredictable beyond a few days." FAQ 1.2, p. 96. Nor could I could find any place in the TAR or AR4 reporting the variability output from its climate models. So, officially climate includes climate variability, which is weather, and under that definition Pope is wrong. In practice, though, climate excludes weather.*

[*Pope seems to be telling us that her scientists modified the Hadley climate models to produce a variability that might account for weather. The official estimate now is that warming will fail to occur about one decade in eight. This is like the blank loaded into one of the guns in the firing squad.*

[*Apparently, we've had one decade where the predicted warming failed to materialize. If could happen again in the next decade, with a probability of one in eight. If it should happen in the next two consecutive decades, that has one chance in 64 of occurring. Invalidating the new and improved AGW model will now take at least several generations. Pope loaded a blank into one of her big guns.*

[*Pope tells us that the new weather buoys replaced many of the ship sources for temperature. The buoys report a lower temperature than do ships, so she urges that the climate models have been underestimating the warming. She implies that someone established that*

the buoy data have a calibration error. Otherwise, the ship data might have had a calibration error, making the earlier predictions overestimate the warming. We need to watch for a report confirming that the buoy calibration was indeed in error.

[*Regardless, she clarifies that what she is reporting has nothing to do with models and projections, it has to do with recent measurements. She says that the lower temperatures from the buoys have lead the Met Office, who cooperates with the Climatic Research Unit (CRU) of East Anglia University in producing data bases of weather history, to underestimate current global warming. Therefore, and proudly, her model projections were more accurate than the public had been led to believe. More importantly, the current unseasonably cold weather is in our imagination! We can be reassured that it's warmer than we had thought.*

[*Pope says, with no support whatsoever, that the chances that the warming is manmade is "very likely", and that the odds of that being true are greater than 90%. Of course, that's what the investigators set the models to do! Regardless, that number needs to be established with calculations. Using identical terminology and standard (very likely = 90%), it sounds of the quantified subjective confidence levels IPCC featured in its Assessment Reports:*

> [In this Summary for Policymakers, the following terms have been used to indicate the assessed likelihood, **using expert judgement**, of an outcome or a result: *Virtually certain* >99% probability of occurrence, *Extremely likely* >95%, *Very likely* >90%, *Likely* >66%, *More likely than not* >50%, *Unlikely* <33%, *Very unlikely* <10%, *Extremely unlikely* <5% (see Box TS.1 for more details). Bold added, Summary for Policymakers, p. 3, fn. 6.
>
> [In this Summary for Policymakers the following levels of confidence have been used to express **expert judgements** on the correctness of the underlying science: *very high confidence* represents at least a 9 out of 10 chance of being correct; *high confidence* represents about an 8 out of 10 chance of being correct (see Box TS.1). Bold added, *id.*, fn. 7.
>
> [The standard terms used in this report to define the likelihood of an outcome or result where this can be estimated probabilistically are:

Likelihood Terminology	Likelihood of the occurrence/outcome
Virtually certain	>99% probability
Extremely likely	>95% probability
Very likely	>90% probability
Likely	>66% probability
More likely than not	>50% probability
About as likely as not	>33 to 65% probability
Unlikely	<33% probability
Very unlikely	<10% probability
Extremely unlikely	<5% probability
Exceptionally unlikely	<1% probability

> [The terms 'extremely likely', 'extremely unlikely' and 'more likely than not' as defined above have been added to those given in the IPCC Uncertainty Guidance Note in order to provide a more specific assessment of aspects including attribution and radiative forcing. AR4, Box 1.1, p. 121.

[*As science, this is all nonsense. Expert opinion is for the law, not science. Expert opinion carries no weight in science, nor does a consensus of any crowd. When confidence refers to the comfort of scientists in some model or result, it is subjective, and beyond science. In science, confidence is the probability that the results will be within the modeled bounds. It is objective, determined by modeling the variability, called noise, in real world processes (à priori modeling), or by statistical sampling (à posteriori modeling). Quantifying the subjective by assigning numbers to vague and ambiguous language descriptors does not convert the subjective to the objective, opinion to science, the unknown to the known, the invalid to the valid. Yet this is exactly what IPCC does throughout its Assessment Reports.*

[*Vicky Pope is a leading spokesman for IPCC modeling, so when she says the chances are greater than 90% that either the predicted or the measured warming is manmade, she has a responsibility as a scientist to rely not on her "very likely" assessment, the IPCC method, but instead on modeling of variability well fit to the real world. Her ethical duties do not include explaining everything in a five minute interview, but in light of IPCC's machinations she had an obligation to distinguish what she was saying from the unscientific IPCC methodology.*

[*Pope had a duty to have previously established her 90% probability on at least three counts. One is against the chances that the Sun as opposed to man caused recent warming trends, and that her modelers did not arbitrarily dismiss the Sun from her models. The second is against the chances that natural processes evidenced in the Vostok record, which her models null at initiation in the 18th Century, are continuing. The third is against a raft of other, major challenges to her models, including her omission from the carbon cycle of the positive feedback of CO2 from the ocean, and her omission from the hydrological cycle of the strongest feedback in climate: the positive*

and negative feedback from dynamic cloud cover.]

Posted by Anonymous | December 2, 2010 3:19 PM

John, Channel Isles wrote:

101205162448

Hi Dr G,

I'm somewhat troubled by your lumping me in with Bernanke at the Fed. I've a genetic family characteristic for independence and private business, a powerful aversion to the public sector and never had any desire to grow a beard!

And as mentioned many a time, I believe whatever Gov't claims to be doing will achieve the exact opposite. The financial community has a strong myth, "Don't fight the Fed" (i.e. don't bet against the all-powerful Wizard of Oz). I did shorting the Euro at $1.38 on the 19th Nov betting against the Fed who wants a devalued Dollar and is using QE2 to achieve it they claim.

Sure as eggs and contrary to all the inflationists, Wall Streeters and my stockbrokers fear mongering the Dollar rose and I sold out at $1.31 (a nice 5 figure sum for just over a weeks work betting against the Bearded Ones impotence to move markets).

You write, "John thinks... the result of increasing the money supply might be to decrease the money supply, the necessary prerequisite to deflation.... who confuse price trends with inflation and deflation... John agrees with Bernanke."

On the contrary. It is you and a vast array of packed to standing room only inflationists' camp that agree implicitly with Bernanke, that "print money = inflation". Bernanke thinks he can magician like the Great Oz inflation from 1.5% now to 2% (what accuracy?) by printing $600bn (actually $900bn) Dollars.

Inflationists like yourself and all the economists are nodding in total agreement with the bearded one. How could it not, print money = inflation is just so logical. Indeed even the public are all expecting inflation according to a recent survey (my it's so crowded at Inflation HQ).

But what have I said? When inflation is a crowded play you always get the opposite, the unexpected. Stop all looking forward logically for danger, look behind you for the unexpected, because the Big Bear (market) Deflation is creeping up fast and is going to bite everyone in the arse!!

One reason is the maths. (From memory!) Bernanke has doubled the money supply to just over $2 Trillion in a couple of years. But credit expansion by the retail banks since the 80's has exploded to something in the realm of $17 trillion. You're all focused on the money supply but like CO2 is to climate I think the money is trivial, I really don't care, I'm focused entirely on the big bad credit bubble imploding.

America has experienced 2 Deflationary recessions, 1835-1842 and 1929-1932. Each one followed a major period of credit expansion (credit bubbles always end in deflationary busts). Austrian economists Ludwig von Mises and Friedrich Hakey both warned the dangers of credit (i.e., debt/IOU's) expansion.

Bernanke can print money all day and all night but he won't be able to keep up with the implosion of credit/debt, won't be able to monetise enough debt or buy up enough fraudulent mortgages to keep housing prices afloat (US house prices dropped 3.9% in Sept, US car sales fell off a cliff with stimulus gone, 8 million credit cards were cut up and thrown in the dustbin last quarter by US consumers).

The tide of liquidity (liquid debt) that rose will go out faster than anyone imagines and as someone once said will leave all those naked exposed. Businesses folding, business lay-offs, asset prices collapsing right across the board and just imagine the consumer, those left employed. It's going to be carnage and every price in the land will be dropping.

Credit imploding = Deflation

I agree Bernanke acts like he's drunk but he's still a bank having to answer to his glittering powerful (private) corporate and individual shareholders in the US and Europe. He cannot monetise all the imploding debt, but the Fed does its best bless it by taking only the most pristine top notch assets onto its balance sheet. But as in the 30's the Fed will capitulate in favour of a half decent balance sheet rather than one looking like the shattered bankrupt Big Banks.

Add to that the moods changing (fast) as even that mouthpiece for the establishment, Bloomberg, ran a recent article titled "The Fed is impotent". Fed critics are in the Press almost daily and breeding in numbers, sniping about the Fed's balance sheet containing mortgages for empty shopping malls, fraud closure mortgages and even fried chicken joints (rename it 'The Feds Fast Food'). The Bearded one's got to stop soon and, as in the 30's Depression, he will pull out from pure survival instinct.

And "instinct" brings me neatly to the field of economics, inflationists (v deflationists) and anarchy (my post back in June). The problem is, despite hundreds of years of trying, economists have no idea of either predicting events or even explaining after the economic events. That's because economics to them is a 2 dimensional chart, cause and effect, numbers on blackboard, bit like physics just with Dollar bills! It's Economics 101, not a social thing right?

The reason economists (and inflationists) cannot predict is because economics IS a social thing, how could it not be being entirely human?!! As I've said many times the economists are measuring the motorcycles wheels, not the human driver, so they never know if the bike will crash before the event, and they've still no bloody clue after it. "The tyre pressure (fundamentals) is exactly the same, Doh,

what happened!"

Economists never spot a trend, they extend the current trend out (i.e. drive ahead by looking in the rear view mirror). 3 months after the economy falls off a cliff these 'Einsteins' come out and say they can most definitely spot there's a change in trend!

Indeed you've said to me the stock market is as un-predictable as anything in the known Universe. That's because cause and effect isn't working, P/E ratios, Dividends, Profits reported and projected, cash on hand, Assets etc are all fundamentals that have zero bearing on a companies stock market price.

The sterilised (of all humanity) 2 dimensional tool kits of economists, fundamental investors and inflationists (print money = inflation) is all using maths and Dollar bills. Where's the 'fundamental logic' in where share prices go, why the economy goes up and down or where the tipping points are for inflation to arrive???

Print money = inflation .....eventually!!!

Strange not to include humanity when you think they make everything on the economics chart move! You'd think they'd start with human nature as THE major component, not just maths and dollars and fundamental measures and exclude the pesky bothersome humans.

So a new article by investing guru, Rob Prechter, and his Elliott Wave Socionomics Institute explains it in a very human way. Here for starters is what economists understand, the rational bit, called the pricing mechanism.

A company wants to sell a product at the highest price. A consumer wants to buy a product at the lowest price. There's the conflict. 2 opposing forces that repel like a magnets, the North and South, the 'Ying and the Yang'.

But of course we have to find balance between these 2 conflicting wishes or nobody gains, and both parties go away empty handed. The Ying and Yang is forced to reach a state of balance, a market price at which Ying agrees with Yang.

The other interesting component on the price mechanism is volume. As the price goes down less and less companies want to compete. As the price goes down more and more consumers want to buy. As the price goes up the reverse happens, consumers pull away so volume drops, but companies increase their interest in the market attracted by higher prices.

So when we go shopping and see 'Beanz 50% Off' our logical rational brain says 'BUY'. The logical part is the Neocortex, top part of our heads. This is all good stuff the 2 dimensional tool crowd can follow with their tyre pressure gauges.

So what happens in investing? This is where it gets weird and hard to follow for the 'Tool Brigade'.

As a stock's price goes up demand from investors increases also. More and more investors pile in. When price rises aren't people supposed to run for the hills!

As a stock's price decreases that's when volume declines and investors clear the decks. This is flummoxing the logical brains, people are piling in as the price rises and there's no 'fundamental' reason at all, they pile out as it decreases but the fundamentals are all the same, the pricing mechanism is upside down, arse about tit, the worlds gone crazy!!!!

So let's ask 'Mr. Hedgy' at the Hedge Fund what happened?

Mr. Hedgy (in a Bar), "Sold my shares in Cow & Gate today, the fundamentals weren't looking too good"

Barman, "You bought Cow & Gate 3 months ago, said the fundamentals were great!!"

Mr. Hedgy, "Er, yeah I did ah! Um, Uganda had a cow virus scare, had to offload!"

Mr. Hedge did no such thing, he rationalised AFTER the event. What happened was he piled in when he saw the price rise 10%, like everyone else. And when the price dropped 10% he got 'fight or flight' mechanism instinctive fear and bolted like a Zebra.

This is the emotional mechanism (Limbic System, central part of the brain) and primal mechanisms (Basal Ganglia, tube-like organ at bottom of the brain) which is "Follow the Herd" instincts and "Fight or Flight". Hedge Funds aren't 'hedge' at all, they're Herd Funds. Herding is precisely their behaviour pattern and they're doing it again.

As in the 30's Depression, the Herd, sorry Hedge Funds piled into the Nifty 50's (50 stocks the herd thought were 'safety' companies that couldn't lose come a crash). Today the Hedges are herding once again in 100 stocks, big companies that are solid on Divis like Procter & Gamble.

As in all animal herds, individuals join the group for both prosperity and safety. We think someone in the herd knows where the best food is, or will forewarn where trouble is. One member of the herd bolts, the fight or flight mechanism spreads rapidly to all and they herd bolts.

So yes the liquid super-intelligence of man puts him above the animals in many ways as you say. But our instincts, sexual and even financial, are still very powerful and still draw us to follow the herd.

That brings me to economics and why economists cannot predict the future of stocks or the economy. They ignore completely the human in their disturbingly sterile 2D mathematical view of their field. The humans are THE component, the ONLY component you need to understand. Debt to asset ratios don't mean a bloody thing.

Retail investors have just piled (herded) into junk debt once again chasing high returns. Hedgies have piled on-masse into the top 100 'safetys'. When one takes flight there'll be carnage in both these markets.

The fringe of the herd will spot a danger. It'll spread to investors nearby then become a stampede. There's NO mathematical or economical tipping point, it's purely instinctive. Like a stock market crash, like a currency suddenly having no social confidence in it and being worthless.

So Bernanke can print what he likes, it's not a maths issue, it's a social confidence issue. And he ain't getting inflation, the credit implosion is too big for him to print to keep it up.

As credit (debt) implodes and all asset classes (property, stocks, long term bonds, art, Gold and the other Commods) drop, people will 'herd' to cash as the only safe asset. Cash will be King as the only safe haven.... out of 'instinct'.

What is the (human) tipping point? These two articles are probably the first of the herd to have made a signal, but it's too early I think while the stock market is still (just!) on the up. Give it a couple of months when stocks crash and fear spreads through the herd, probably not long after that.

French footballer, Eric Cantona, says make a run on the French banks and stop the corruption

http://www.marketsentinel.com/blog/2010/11/social-media-and-the-rise-of-financial-activism/

Another of our favourite cartoon series, 'Crash the JP Morgan'

http://www.zerohedge.com/article/silvergoldsilvercom-runs-out-all-precious-metals-hours

These are 2 very interesting new (socially instinctive) socio-economic events. The web as (new) tool for the oppressed (despite the best efforts of Totalitarian Gov'ts as in the Wikileaks shut down). Society organising a run on the corrupt-to-the-core big bad banks over the web instead of revolutionaries running down streets to bring the rotten elite to a chopping block.

This development is going to get very exciting, bringing down a bad bank would be awesome :)))

How long before economists make a note of socio-economic events rather than just 'economics' after this?

[*RSJ:Enjoyed your analysis.*

[*I can't speak for economists. Probably no one can. But let me hypothesize that there exists a rational economist to address what he might do. He might divide society into two groups, those that act rationally and those that do not. Now the ones that do not are unpredictable. They are noise in the system over any investment interval. However the rational people react to information. These constitute the signal in an economic system. The trick for our hypothetical economist is to model how this rational group is responding to information in the system. And for this group we can lay down some simple rules which have had some value. This is the model that leads to monetarism.*

[*My model has a poor signal to noise ratio, that is, few rational actors compared to the irrational. Your model, along with Prechter and Elliott Wave nonsense, is worse: all noise. You can predict nothing, no cause and effect, as you admit. But you only need a tiny advantage to overcome house odds.*]

Posted by John, Channel Isles | December 5, 2010 4:24 PM

John, Channel Isles wrote:

101221123956

Why the search for "rationality" in economics, stock markets even life itself?!!

[*RSJ: Because rationality leads to predictability, and that can make us money or keep us from doing stupid things, like trying to cut back on CO2 emissions, which are benign and beneficial.*]

Is our Universe rational? You know the exploding neutron bomb that gives energy to all life on Earth. Yes you can explain the IR wavelengths shooting from splitting atoms but is that Mother of all chaos called the Sun rational?

[*RSJ: Only the human part of the universe can be rational. Of course, all models of things in the universe are manmade constructs, eligible to be rational.*]

The molecular worm (DNA) that controls all life forms here on Planet Earth is first and foremost a survivalist. The survival, mate and propagate instinct. Fight and/or flight, mate, eat, socialise and then have a snooze. These are instincts, not 2D rational mathematical objects.

[*RSJ: DNA is first and foremost a self-replicating, adaptive molecule that conveys adaptability on life forms.*]

So take a look at the stock markets and describe their ups and downs, zig-zags sideways as rational or based on fundamentals. Impossible to do.

[*RSJ: Not at all.*]

The stock markets are waves of human economic confidence and pessimism, of animal instincts herding. Watch a flock of birds or water buffalo and you'll get the behaviour patterns of the stock market and economic tides of expansion and recession.

[*RSJ: If that model makes you feel better, or gives you some gambling advantage, do use it. But watch a flock of birds or a herd of water buffalo long enough, and you, too, might observe evolution at work.*]

As for the rationality of "the news" effecting stock markets or the even larger currency markets (Forex) please name any event (announcement of war, earthquake, tsunami, Government announcement, The Fed, 9/11 attack etc) you think effected the indexes or currency?

[*RSJ: Glad to oblige. The US Government announced the unprecedented expansion of the money supply, and then executed the plan. This was highly inflationary (i.e., an expansion (inflation) of the money supply. As inflation must at that level, it materializes in higher prices, completing the definition.) These rises have been evident for some time in precious metals and equities. They are also evident in GDP because our government uses CPI as an inflation index, even when the velocity of money is in the doldrums. We currently have no significant economic growth. We don't have an apparent recession because the GDP is inflated. We are deep into an employment recession, which our leader is aggressively trying to exacerbate.*]

I'll show you the trend in place weeks before any news event didn't change due to any "rational" reaction to "news". In fact quite the reverse, the stock markets, as indexes of human mood, MADE the news. Wars begin at the end of bear markets, the US civil war (1861-1865) was a murderous affair began at the bottom of a terrible recession (see also WWI and WWII).

From experience I have to agree with you Elliott Waves are pretty terrible at predicting markets and cannot be relied on. But socio-economics is a brilliant tool at predicting social changes from stock market indexes and most certainly are reliable. And rationality, like most things academic, has little to do with it.

[*RSJ: Great. Now all you have to do is predict the mood of the herd. Personally, I'd rather predict stock prices.*]

Bernanke wants inflation and a weak Dollar but he's going to get a strong Dollar and hyper-deflation. Government and its crony institutions are the slowest herding members of any society. And they're always 100% wrong on trend calls.

[*RSJ: Under established definitions, that model is laughable. Under other, unnamed definitions, it is irrational.*]

Posted by John, Channel Isles | December 21, 2010 12:39 PM

John, Channel Isles wrote:

110426141606

Hi Dr G,

Can you define being rational or rational thinking please?

[*RSJ: OK. Good challenge.*

[*For openers: Rational: purely objective, ingenuous and unambiguous.*

[*This applies to action, including material, mental, and verbal, and to the inductive ability to generalize. By objective, I mean according to rules and procedures, and therefore consistent, and intended to achieve a goal according to some cause and effect recipe. The rules include the conventional rules of language, including its derivatives of logic, mathematics, and the meaning of words, and any special, contextual rules adopted unequivocally and unambiguously.*]

It appears to me you've roped in, quite illegally, that rationality includes knowledge when you say, "Because rationality leads to predictability..."

[*RSJ: You're right in this respect: a person can act rationally, in obedience to some easily disproved model for cause and effect held in his mind or shared in secret. People are guilty of this all the time.*]

Mans knowledge and understanding of the Universe is not as a result of rationality or rational thinking. Knowledge, such as $E = mc^2$, is the result first of human drive (the same as animal drive) such as ambition, desire to impress or one-up peers and no doubt be showered in female attention. Secondly it can be as a result of obsession, personality defects (Van Gogh's genius was due to manic depression) and then a Eureka moment or an inspirational thought out of leftfield (the sub or un-conscious).

[*RSJ: To the contrary, such models are abundant, validated by having had their predictions tested, and are a consequence of the scientific method. Hence they are rational. Labeling the creators of theories and laws as sexual psychopaths in the face of no evidence is an excellent example of irrational thinking.*]

Rational thought is the frontal lobe of the brain. It is not animal instincts or un-conscious or subconscious thought.

[*RSJ: The flight response is instinctual and subconscious, whatever the lobe. It is rational, even if the fear that engendered it was silly.*]

Whether it be music, science or envelope piercing new business or technology the entire process is not rational, it is an emotional animal/biological drive.

[*RSJ: I would guess then that you see this process in primitive tribes, and that you've never heard of the Cargo Cult.*]

As I see it rationality comes up the rear, once the new knowledge or way of doing something better has landed, and nods saying rather dryly, "Er, yes that appears rational!"

[*RSJ: We should name your model Channel Isles John's Suppository Conjecture of Knowledge.*]

Lieutenant Commander [Spock] (Star Trek) was a mine of knowledge which made him interesting (sometimes!). His rational logical side was pretty dull, which is where I'd place this form of thinking process. I think I'd define rational or logical thought as 'thinking the bleeding obvious but un-creative and emotionally in relapse'. And of little value except of what is already understood.

I also don't think logic or rationality can, as you claim, predict. Knowledge can, rationality not. Life has a habit of not being logical and sending rational thinkers a curve ball and getting their knickers all in a twist.

Knowledge itself may make something predictable for a time but once it is gained change or a new vista always appears. The only constant is change as they say.

Nor is evolution logical or rational. The human body, like any animals, is set up to repair. Namely it is designed to take damage, it is designed for the unpredictable. Life came from the unknown (an irrational mega explosion that kicked off life) and is going into the unknown.

[*RSJ: Irrational! You use the passive voice to hide your presumed designer (or Designer, as you might see fit). Then you describe this [D]esigner's work as effecting a valuable end: survival of the species. Sounds pretty rational.*]

What is the price of tomatoes in 2022, indeed what currency will we even purchase them in? Rationality can only shrug its shoulders or extend a trend as a rational for the price of tomatoes. It doesn't add any/little value to any process far as I can see. Current knowledge I doubt, rationality not, ideas out of leftfield and the unconscious possibly might get the tomatoes right!

[*RSJ: Wow! Would I be irrational in thinking they don't let you have sharp objects in there?*]

Posted by John, Channel Isles | April 26, 2011 2:16 PM

John, Channel Isles wrote:

110428121918

"Would I be irrational in thinking they don't let you have sharp objects in there?"

No you'd neither be rational nor irrational, you'd be speculating wildly. Here in Spain the tomatoes are very tasty while all around, Spain is gently falling to bits due in large part to (some) peoples irrational belief in Government 'separating' us from animals and anarchy. I'll take natures natural laws (anarchy) thanks as it seems more beautifully ordered and far less chaotic than your warmongering parasitical social model.

Here insolvent green energy, property credit bubbles, debt, over-leveraged banks and the suicide socialist State is surely turning the place into a sun kissed s…t hole, much like America.

Human rationality is not in evidence, nor irrationality for that matter. Just the usual ebb and flow of life: parasitical and productive, motivated and sloth, confident and pessimistic, speculative and conservative, knowledge and ignorance. But

rationality as usual is having nothing whatsoever to do with it.

You say we can 'be rational' even though our belief in something dumb is ultimately irrational. Like my previous belief in Elliott Waves, and your belief in the need for Government.

[*RSJ: Right. We can always admire Somalia, right?*

[*The U.S. and Great Britain were quite passive, non-"warmongering" as you put it, until Hitler. Lesson not learned. We were passive again as the Communists made lunch out of Eastern Europe, China, Cuba, and Korea. Lesson learned, at least in some places over here. Then came 9/11. Lesson driven home almost everywhere over here. Compared to the UK, the US has a minimalist government. That's why and how we developed the wherewithal to do something about the madmen around the world before 9/11 became another blitz. It's all quite rational.*

[*The problem is that the knowledge of experience decays as the generations evolve. So it came to pass that the youth, combined with the left, who never learns, elected a pretty, semi-articulate, ignorant, irrational Marxist to lead us all. Like a speed boat that stops too fast, he is about to get swamped by his own wake. The bailing is already underway.*]

My dumb belief in Elliott Waves as a predictive model for stock markets was not rational or irrational at any point. It was just plain ignorance of the models ability. Knowledge and acquired experience, not rationality, exposed its abject failure to predict accurately. Knowledge and experience also exposes the abject failure of democratic Gov't as a 'rational' (beneficial) belief system for society

[*RSJ: I say again, rationality has nothing to do with the correctness of any of the rules, processes, or models one is following. You acted, I presume, rationally with respect to the Elliott Wave model. That didn't change because the Elliott Wave model is an analog of*

Anthropogenic Global Warming, or of somebody else's religion, whether a theocracy or a pseudo-science. You rejected my sound advice rationally.]

"Rational: purely objective, ingenuous and unambiguous."

Knowledge (and experience) is the value added, not whether you think rationally or objectively.

[*RSJ: You opened the subject of rational behavior. We weren't discussing knowledge. Some wag said the problem is not in the things that we don't know, but in the things that we know for certain that aren't true.*

[*Knowledge is a bunch of data your brain imperfectly generalized and packed into your mental models. Some of it is valuable to you for sure, but much of it might be a huge liability. E.g., now you know about Elliott Waves. Sometimes we want to acquire knowledge about what isn't true, e.g., other people's religion, AGW and other frauds. Regardless, knowledge of both kinds becomes valuable when you use it rationally. The ability to sort out the good from the bad is part of the rational process*.]

A bull elephant is charging. Your objective but clueless brain says 'exit left fast'. The Zulus say stand still, make no sound. The objective, but ignorant brain, gets trampled on, Zulu lives another day. Knowledge rules, not objectivity.

[*RSJ: Both the standing Zulus and the squished Zulus acted rationally. The standing ones just had a better model for reality then their squished forbearers*.]

"I would guess then that you see this process in primitive tribes.."

There's no difference in the behaviour patterns of industrialised humans from primitive, nor between the fish in the sea or the migrating wildebeest. The one matter worth noting, but not separating to nature as they share the same desires, is man's accelerated acquisition of knowledge and with it his productive (and destructive) tools (e.g. industry, energy, technology, etc). In particular the last 200 of our 2 million years.

Point being knowledge is the stand out feature in man's progress, not rationality

[*RSJ: My point is that what was gained from knowledge was a result of rational use of it. Knowledge builds on knowledge by the rational process*.]

"We should name your model Channel Isles John's Suppository Conjecture of Knowledge"

Being rational according to your 'modeling' can be both a state of best (at that point) objectivity but also a state of delusion and ignorance. Again rational thinking's value is entirely based on the state of knowledge or ignorance in that thought process (i.e. it adds no value itself). That's because we rationalise after the event of acquiring a new piece of knowledge. Rationality is a dull mental cart that follows the horse (knowledge).

[*RSJ: You asked for my definition of rational. I supplied one for you, and have stuck to it. That set the groundrules; feel free to provide a different definition. I insist on my definition only until you do. Therefore, rational does not include the state of knowledge. Rationality is a process of logic and consistency. It might arise out of sterling knowledge, or rubbish*.]

"Irrational! You use the passive voice to hide your presumed designer.."

Where'd you get that idea? There is no presumed designer in my understanding of the Universe. As I've said quite clearly the Universe is random, un-balanced (that's why change keeps occurring) and there is no 'grand logical rational design' of either the past or the future. Knowledge, not rationality, can help understand the past and help predict the future (to the point of knowledge). The Universe is what it is (and it ain't rational)

[*RSJ: You own the idea. You said the human body "is designed to take change". That implies a designer. With your clarification, you apparently meant to say the human body has evolved to tolerate change*.]

It is you that have tried to apply rational thought to the Universe which I think you are confusing with knowledge.

"..survival of the species. Sounds pretty rational.."

[*RSJ: You described a process by which a designer created a human body that tolerates change. You thus described a process with a useful outcome. Your out of context quote eliminates the subject of what sounds rational. It is not anything I claimed. It's what you described that sounds rational*.]

Nothing whatsoever to do with rationality. Rational thinking of life's survival instincts and sexual drive (or "sexual psychopaths" as you put it!) is coming up the rear of the then new Darwinian discovery and saying "Oh that's rational". Rationality is a rear view mirror, and a dull one at that.

[*RSJ: Are you saying that Darwin said of something he observed that it was rational? I don't think he ever did that. Rationality does not apply to things that don't think. You asked for a definition of "being rational or rational thinking". When you remove that context, I have to change my definition:*

[*Rational: a thought process that is purely objective, ingenuous and unambiguous.*

[*Natural processes, lacking thought, cannot be rational. If you choose to anthropomorphize them, bringing in a creator as you implied, then their creator, whether God or Mr. Evolution, might be deemed rational. It's your theology; do what you want with it. The big problem*

with Darwin is that creationists and the like complain that he did not anthropomorphize his observations.]

Posted by John, Channel Isles | April 28, 2011 12:19 PM

Post a comment

(If you haven't left a comment here before, you may need to be approved by the site owner before your comment will appear. Until then, it won't appear on the entry. Thanks for waiting.)

Name:

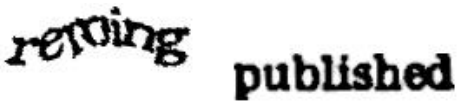
Email Address:

URL:

Remember personal info?

Comments: (you may use HTML tags for style)

Verification (needed to reduce spam):



Type the two words:

Preview Post

Search

Search this blog: Search

About

This page contains a single entry from the blog posted on **October 24, 2006 6:06 AM**.

The next post in this blog is Gavin Schmidt on the Acquittal of CO2.

Many more can be found on the main index page or by looking through the archives.

Subscribe to this blog's feed [What is this?]
Powered byMovable Type 3.38