

Can Mankind Really Expect To Tame Earth's Climate And Remove It From Cosmic Control?

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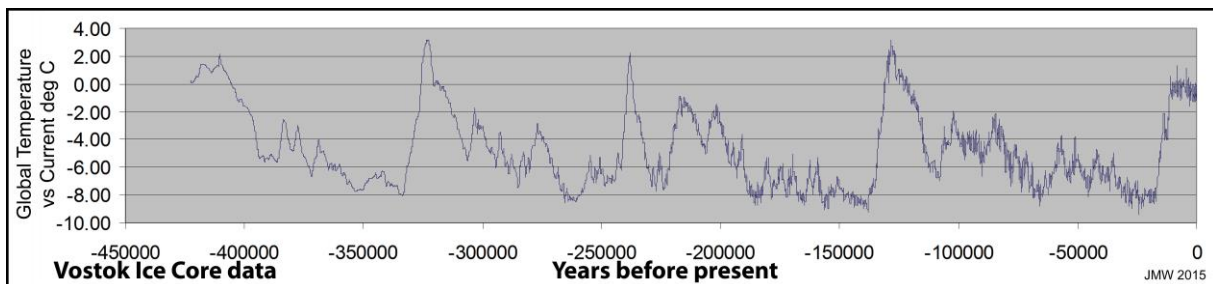
[HiDef figures are available in the web version \(Click to Access\)](#)

ABSTRACT

Observations about global temperatures and modeling are included. The current "global warm period" is compared to those of the previous three with each beginning at 1.5C below the current level and ending 1.5C below this level. Initial warming is rapid (roughly 2C/500-years) while cooling during the last half of the cycle is slow (roughly -2C/6000-years). Planet earth did not see the excessive warming of past cycles during the current heating. It should now be very near the end of a typical 12,000-year "global heat wave", however, since it has been in it for 11,400 years. The analyses in this paper are based on the reported Vostok Ice Core Data. An addendum shows that climate modeling programs are exponentially deviating from the relatively constant, observed global temperatures for the past 35-years. A figure shows that all of the recent temperatures fall within 1-sigma of the global mean temperature for the past millennium.

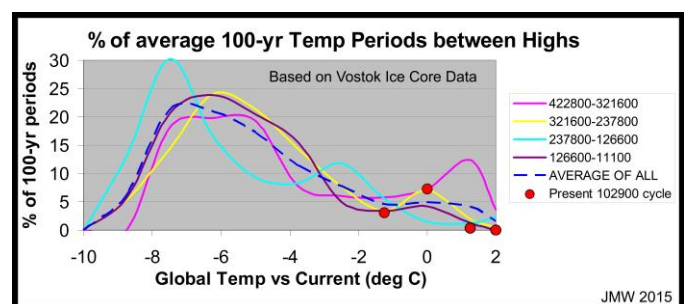
[Claim \(click to view\)](#): "A whopping 97 percent of all scientists agree that human activity is causing our climate to change but only 40 percent of all Americans believe this because of "pseudo scientists" and special interests". (An evaluation of the 97% claim is presented in the SUMMARY.)

When it comes to global thermal changes, mankind has NOT been a major factor, except maybe since the industrial revolution started in the mid-1700s AD. While global thermal data for distant past is difficult to obtain, the Vostok Antarctic Ice Core data¹ at least provides a view of the past 422,800 years. The Vostok Antarctic Ice core data was sorted into 4228 100-year bins which were then averaged. Where there was no datum in a bin, the bin was visually interpolated from the data in adjacent bins. The resulting data distribution is shown in the figure below.



Mankind's "free roaming range" during these global thermal cycles is presented in a [YouTube 2 min 54 sec video \(click to view\)](#). Info on the generation of this video is presented in ["The Molding of Mankind - Planet Earth in a Thermal Vise" \(click to download\)](#).

The figure on the right shows smooth curves through the percentage of the thermal data that falls into 11, evenly divided, thermal portion for each high-to-high temperature cycle (~100,000-year) of the Vostok data. The dashed blue line show the average % of global temperature levels of all four cycles.



Where are we in the global thermal vise? The last 11,400 years have consumed almost all of the warm temperatures for the next cycle - the red dots in the figure. With 89% of the current ~100,000-year cycle remaining, global temperatures will get colder and downright raw at the cycle's perigee (~ - 8°C

relative to the current global temperature). The global thermal clamp will continually put more restrictions on agricultural crop (food) production. Concern about global warming is interesting in that human activity of the "global warming" nature may actually prolong the current thermal period! As crop production diminishes, so will the world's population. Energy to keep the remainder warm will decrease simply because there will be fewer people to supply it AND maintain its distribution! Lodging will deteriorate. What will last through the next perigee? In a 100,000 years, WE will be the "ancient aliens" that currently get TV hype! How do the proponents of climate control plan to get mankind to the next warm spell - about 100,000 years from now? Mankind needs to be thinking about how to feed and heat itself for 100,000 years of cold, inhospitable climate. Droughts, storms, etc now are minor compared to what mankind will face down the road.

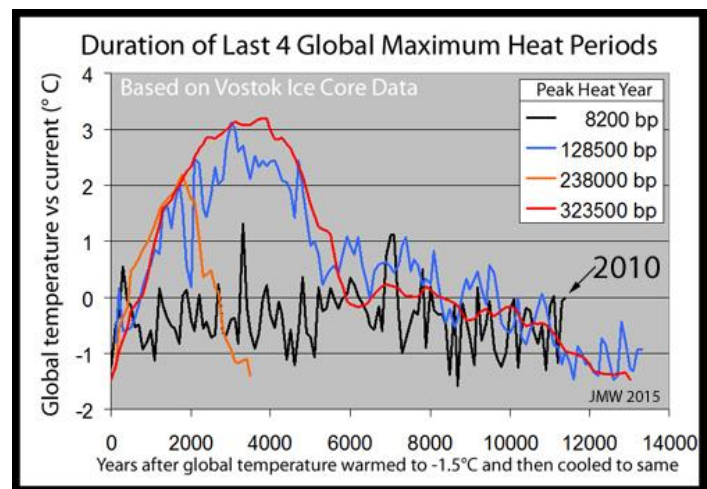
The short-term (a decade or two ahead?) climate changes are what "scientific" folks are focusing on.

Cleaning up the environment to make life more livable is one thing: for example, cleaning up the air in steel mill towns and that emitted from uncontrolled, coal-fired, electricity generating stations and the water in streams in mining areas, etc., etc. Controlling the climate of the earth is a bit "bigger" task! And, as John Bartlit of NM Citizens for Clean Air and Water has pointed out in "[Value Variable Weather](#)" ([click to access](#)), who gets the favorable climate at the expense of the rest?

Current global temperatures are relatively constant and "mild" when compared to the long-term trend. Ice caps are responding to calories already deposited to the oceans. It takes a while for massive chunks of ice to respond to warmer water - but think about ice cubes in water and about how cold that water eventually gets when those ice cubes are turned to water.

What I see is that the advocates of humans making global temperatures unacceptably warmer are NOT looking at the long-term, but rather at the short-term. A question: Is the green-house effect of CO₂ countering a natural cooling that the earth might already have begun to experience and thus is giving mankind some "extra" warm years? "[A Look On the Brighter Side of Global Warming](#)" ([click to access](#)) highlights some of the presentations given in the conference held in Santa Fe this past weekend. Knowing how to create some warmth may eventually be to mankind's benefit! For how long, however?

The figure [on the right](#) gives a view of how the current global "heat wave" compares to the previous three. The duration periods of the past 3 and the current global periods of temperatures are started, for the comparison, 1.5°C below the current level and continue until they drop back to that level. The rise is rapid (roughly 2C/500-years), whereas the fall during the last half of the cycle is slow (roughly -2C/6000-years). Based on the two broadest heat periods, we are nearing the end of our current warm period. The data clearly shows that the current "heat wave" is far "milder" than the others in the last 400,000 years!

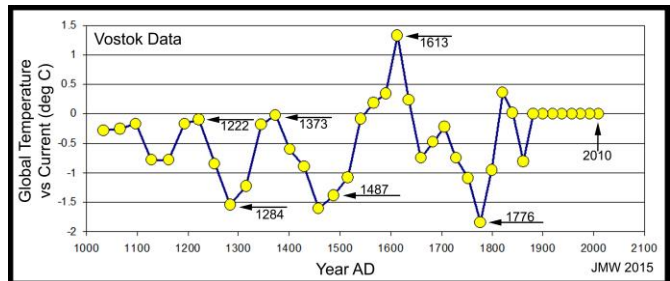


Readers might want to acquaint themselves with the broad picture as well as the short-term "pitches" of "Global Warming" alarmists. Mankind's recorded history only covers a few millennia and the temperature changes during this period have been minor compared to those over millennia of

millennia! By and large, we think about today, tomorrow, next week and maybe some decades into the future and do not worry about many generations to follow us.

Even if mankind can dramatically manage climate behavior during our current, "relatively smooth", warm period, what are the prospects of taming the "extreme" periods - namely millennia of millennial "Big Chills"? What technologies should mankind be working on to sustain even a modest population level during the major part of the next 100,000-year cycle? What will induce mankind to act? And when? Can corn and wheat be modified to grow productively at very low temperatures at which they hardly do so now?

Advocates for an urgent need to control the climate might claim that the trend in recent years is sharply upward and thus more critical than expected from my graphs that represent changes for centuries. Consider the global thermal temperatures for the last 1000 years that are presented in the figure [on the right](#). Columbus sailed the seas to "the new world" as global temperatures rose in 1492; Washington's troops had a cold 1777 at Valley Forge. Interestingly, the reported Vostok core data¹ indicates that global temperatures have been fairly constant over the past century! Strange? A problem in analyzing the topmost layers? One would have expected more variation - this is partially addressed in the ADDENDUM.



Do current models, such as the "Global Change Assessment Model"², which makes 5-year predictions from 1990-2095 for "global mean temperature rise" (note *rise*, not *change*), **precisely match** the **past 400,000 years of global temperature changes** on a century-level? If these models do not generate the observed, century-average behaviors precisely, their accuracy in making yearly, 5-year or decade predictions are suspect, at best. What does the comment³ that the "**discrepancy between models and actual temperatures in the last 10 years have been resolved** **It isn't warming quite as fast as the model said** because of a countervailing (cooling) ocean cycle" say about such modeling? Remember "ice-cubes-in-water"? It takes quite a while for the oceans to warm enough to break off gigantic chunks of ice from the Polar Regions. But after the oceans begin to cool, and cosmic control brings on the "BIG CHILL",

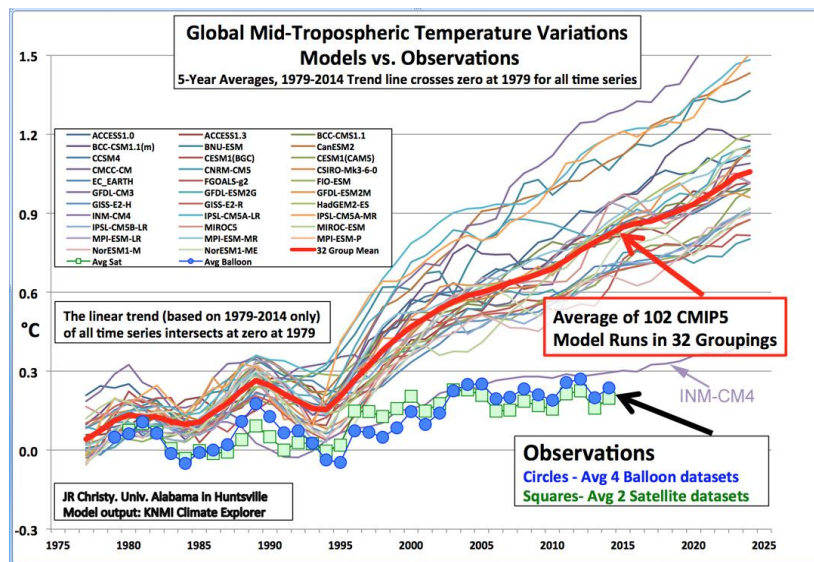
SUMMARY

I assume that I would be included among "the scientists". I spent a number of years studying environment pollution related to coal and uranium wastes for EPA and DOE at the Los Alamos National Laboratory. I might be included with the "97%" that say mankind is causing "our climate to change" - depending on how the questions are phrased. When the American Meteorological Society did a survey and specifically asked "*Is man the dominate controller of climate over the last 50 years?*", the response was only 52% "yes".⁴ Christy⁵, others and I would now be in the negative half. I suspect that "climate change" and "environmental pollution" are not very well delineated. Air pollution that extends 10s of thousands of feet upwards is hard to miss. I went through Gary, IN, back in the 1960s when the sky was bright orange and the sun set well before it went below the horizon. Media often show citizens of Beijing wearing masks because of the extremely poor air quality. Citizens of Beijing would very likely say that "human activity" is changing their "climate". These are examples of mankind's polluting the environment and not of global climate changes per se. The greenhouse effect of CO₂ generated by massive levels of coal and petroleum combustion to produce electricity makes

common scientific sense. It is the magnitude of the effect of such pollutions on a global scale and the non-human effects that are the issues. Having delved into the matter, it is not clear that we are destined for a 2°C rise over the current global level when the natural repetitive cycle should be in the declining stage of a 100-century thermal cycle. One might ask this question: what would the average global temperature be "right now" if all of the CO₂ generated by mankind in the last 300 years were "instantaneously" removed from the atmosphere? The answer *might be* chillier! There is NO DENYING that human activities are polluting the environment! Pollution IS something mankind can moderate! Global climate control is something else!

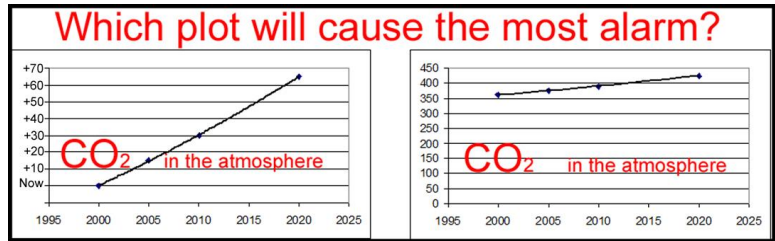
ADDENDUM

The figure below is from John Christy of the University of Alabama - Huntsville.⁶ A version of this plot with only the average of the computer outputs and the actual observations was presented by him on May 13, 2015 to a congressional committee.⁷ [An earlier version is included in a University of Arizona atmo336 course lecture⁸, which is a good read on modeling and variables ([Click to access](#)).] The error bar for the observed data is $\sim\pm 0.08^\circ\text{C}$.⁶ Note that the **measured global temperature has been nearly "flat-lined", within data error, for the past decade**. Christy's figure highlights that almost every model - 32 were evaluated - makes predictions that greatly deviated from actual observations for the past two decades with the extrapolated divergences becoming greater with time! It is clear that all of the models, except Russian INM-CM4 (marker added by JMW), have been going off on a tangent since 1995! If CO₂ has an effect as great as these models would indicate, then the models are greatly underestimating something with an equalizing opposite effect. As pointed out earlier, if observed data is NOT precisely modeled within their error bars, then the predictions of the model, even into the next decade, must be viewed with a great deal of consternation!

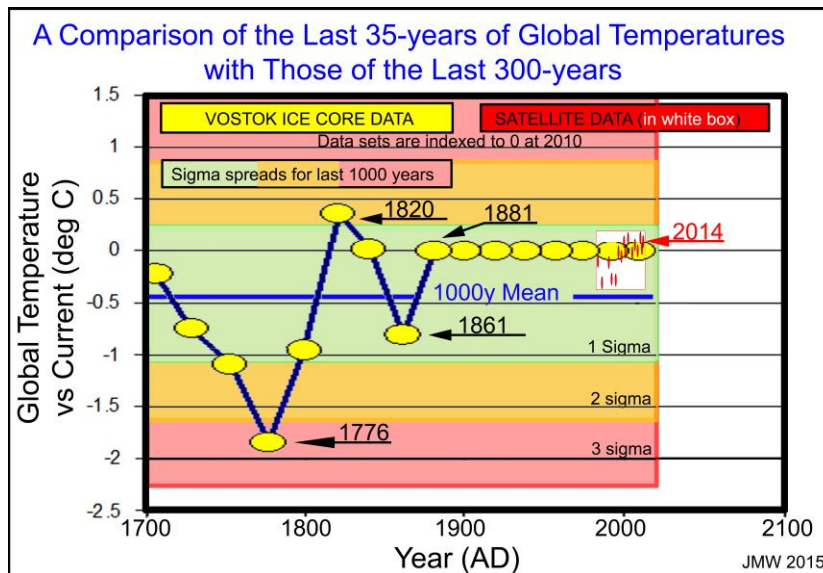


The "greenhouse effect of CO₂" is a major component of the models. CO₂ is released from ocean water as global temperature increases - physical chemistry. Since landmass surfaces warm faster than circulating ocean water, CO₂ releases will lag overall global temperature rise. CO₂ atmospheric levels rise even without human intervention. Mankind's adding extra CO₂, as it is doing now, does not necessarily mean that the global temperature, which is strongly cosmically controlled, will dramatically increase. CO₂ return to colder ocean water is slow - diffusion controlled at the surface layer - and will lag the global temperature decrease as the oceans cool slower than landmass surfaces. Unabsorbed CO₂ will keep the level higher for the next "heat wave".

The models emphasize what they would predict on a very short time scale (35 years) with a reference to "1980" as the baseline. Significant ups and downs in global temperatures on a decade scale without massive human contributions to atmospheric CO₂ levels are clearly evident in the Vostok ice core data. Future CO₂ levels are said to be of considerable concern. The graph on the left of the figure [on the right](#) emphasizes a steep increase relative to the level in 2000AD. Exponential projections are often presented beyond this time period. But even 5 years from now, at 2020, the rise in CO₂ levels looks dire. When the same data is plotted on a total CO₂ level scale (graph on the right of the figure), an increase in CO₂ level is still apparent, but the increase hardly suggests the same alarm.



As noted earlier, the global temperatures over the past millennium have been mild and relatively constant compared to those of the other "heat waves" of the past 400,000 years. To put things in perspective, I have placed the last 35 years of satellite-derived global temperatures from Christy's plot on a scale with the Vostok ice core data for the past 300 years - the red data in the white box in the [figure below](#). For further couching of the past 35 years of observed data, the mean global temperature for the last millennium and its sigma spreads [1 sigma (68% of the data), 2 sigma (95%) and 3 sigma (99.7%)] are demarcated.



Some information that can be gathered from this figure:

- The only temperature period that has deviated by as much as 2°C from the current level in the past 300 years was in the late 1700s and it was on the colder side!
- The past 35-year period of global temperatures are within 1-sigma of the mean millennial value; albeit, on the warmer side
- The changes in the last 35 years (~0.3°C), when compared with those encountered before the industrial revolution, are NOT out of line with what might be expected from factors not involving human-generated CO₂
- Based on the thermal levels during the past millennium and the fact that planet earth is headed for colder times in its recurring 100,000-year thermal cycle, it seems quite doubtful that the global temperature will get to be 2°C higher than it is now
- Human-generated CO₂, as a pollutant, should be controlled as such and not because it greatly affects global temperatures, which primarily are controlled by other factors.

Climate change and droughts are VERY SERIOUS stuff for countries and regions that are adversely affected; esp, those with extensive agricultural activities. Forces that oppose any CO₂ effect to keep the global temperature constant will still be there, even if CO₂ emissions are reduced.

People tend to forget that decade-long droughts are fairly common and have occurred throughout documentable history. Have a look at the US National Oceanic and Atmospheric Administration's own website entitled "North American Drought: A Paleo Perspective"⁹ ([Click to access](#)). Current CO₂ levels were NOT the cause of past droughts! Since Planet earth is cosmically controlled and the oceans and atmosphere are fluid, LONG-TERM CLIMATE CONDITIONS ARE NOT CONSTANT.

REFERENCES

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- ¹ The data available from CDIAC represent a major effort by researchers from France, Russia, and the USA; Jouzel and others in these refs - Nature 329:403-8 (1987), Nature 364:407-12 (1993), Nature 399: 429-436 (1999) and Climate Dynamics 12:513-521 (1996); <http://cdiac.ornl.gov/ftp/trends/temp/vostok/vostok.1999.temp.dat>
 - ² *Climate Change*, <http://www.epa.gov/climatechange/EPAactivities/economics/modeling.html>
 - ³ Keller, C., in *A Look On The Brighter Side Of Global Warming*, <http://www.ladaily.com/content/look-brighter-side-global-warming>
 - ⁴ Stenhouse, N, et al, *Meteorologists' Views About Global Warming*, <http://journals.ametsoc.org/doi/pdf/10.1175/BAMS-D-13-00091.1>; Taylor, J, *The Latest Meteorologist Survey Destroys The Global Warming Climate 'Consensus'*, <http://www.forbes.com/sites/jamestaylor/2013/11/20/the-latest-meteorologist-survey-destroys-the-global-warming-climate-consensus/>
 - ⁵ Gattis, P, *7 questions with John Christy and Roy Spencer: Climate change skeptics for 25 years*, http://www.al.com/news/huntsville/index.ssf/2015/04/7_questions_with_john_christy.html
 - ⁶ Christy, John, Private communication.
 - ⁷ Gattis, P, *Climate expert John Christy: U.S. emission cuts won't make difference*, http://www.al.com/news/huntsville/index.ssf/2015/05/climate_expert_john_christy_us.html
 - ⁸ *Climate Models' Predictions of Global Temperature Change*, a lecture in the U of Arizona atmo366 course; <http://www.atmo.arizona.edu/students/courselinks/fall14/atmo336/lectures/sec6/change.html>
 - ⁹ *North American Drought: A Paleo Perspective*, https://www.ncdc.noaa.gov/paleo/drought/drght_history.html