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The Molding of Mankind Planet Earth in a Thermal Vise

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The dinosaurs were wiped out about 65 million (!) years ago[1]. That is a rather long time in the past. There has been plenty of time since for mammals to develop. Mankind is estimated to be around only for the last 200,000 or so years[2] - about 10,000 life-times (!) - although some recent findings suggest MUCH longer, like 400,000 years[3] and, now, even longer at 2.8-million years[4]! New info suggests that Neanderthal got together (breeding) with the Asian strain[5]. The gap from 65-million to 400,000 or 2.8-million years seems like a long time for mankind of any form to arise! Plenty of 20-year life-time cycles. But mankind is not a fruit-fly - a "fruit" (sic) maybe, but not a fly! A sharp-beaked wombie would have played havoc to the womb lining. Big bulging eyes would have found plenty of blinding branches. Bugling skulls would not have rotated easily in the womb either. Be interesting for some stats on nature selectivity of wombies versus eggies.

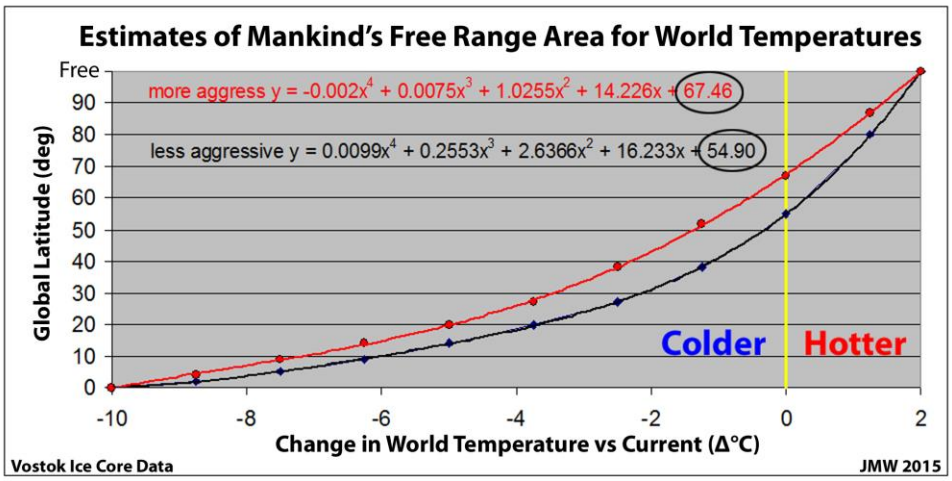
Watching "Ancient Alien/Astronaut Theory" made-for-TV programs, one gets the impression that "if something back in time can not be explained, then it must have been aliens who did it or caused it". Much of the reasoning seems to be that mankind was not "bright" enough way back in time (≥ 5000+ years!) to have accomplished some of the things that are being discovered, that they could only walk before the Vikings decided to sail the open seas, and that technology has developed fairly continuously throughout mankind's existence; hence, there could have been nothing created by mankind that has only been generated in recent millennia. Some would even say this paper is written only because some aliens favored a few of our intellectuals with their smarts.

What are the main things that mankind needed help from "aliens" to do way back in time? Mainly to be taught how to quarry really huge (!) stones and move them long distances[6] and to mill some of those stones to near modern tolerances[7]. While these feats are impressive, they do not seem to involve even the low end of the "high-tech" knowledge that "alien astronauts" could have gifted mankind - assuming those astronauts were as smart as those theorists claim. What is clear is that the ability to perform such skills were followed by periods wherein mankind also reverted back to square one: chipping obsidian for arrowheads and hatchets and piling small stones on top of huge stones and making huts.

Mankind's technology grows as "needs" arise with time. How far that technology advances is related to a number of circumstances: resources, ingenuity, application, etc. Like rats in a maze, mankind "learns". Unlike those rats, however, mankind makes his own maze(s). Mankind also procreates, just like rats. Given "endless" food and favorable environmental conditions, both easily populate expanding mazes. When conditions no longer support them, they revert back to a "minimal" existence mode. How many cycles can occur for mankind? Many, until the earth no longer exists. The question is to what "minimal" level mankind reverts back to and still retain some of the gained technology through a long, raw perigee until the next heat wave occurs.

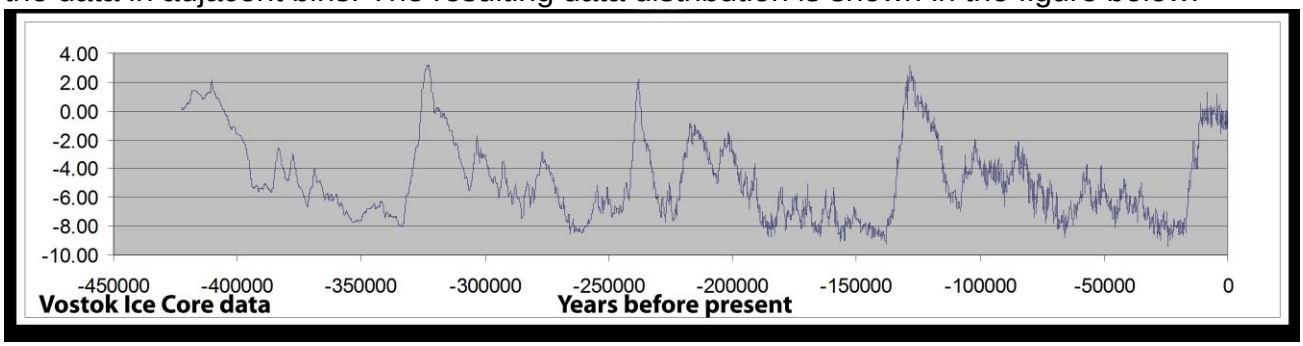
Mankind have been subjected to many global thermal squeezes. A "little ice age" occurred just a couple of centuries ago (mainly 1600 to 1800)[8]. Europeans took to the seas and worked to develop energy sources as a response. A little "chill" might invigorate mankind to more cerebral activity, but think of what cycles of 100 century-long thermal squeezes many times more severe than that of the little ice-age would do.

The author's model of mankind's roaming tendency based on global (world-wide) temperatures is given in the figure on the right.



The extremes are "so-cold-that-mankind-can-only-survive-at-the-equator" (-10C or more world-wide less than current) and "complete-freedom-to-exist-anywhere-on-the-globe" (≥2C world-wide than current). Less-aggressive "footers" might venture outward and live at 55 deg N/S of the equator with today's 100-year average temperature. More aggressive "footers" would venture and live at the arctic circle (67 deg N/S).

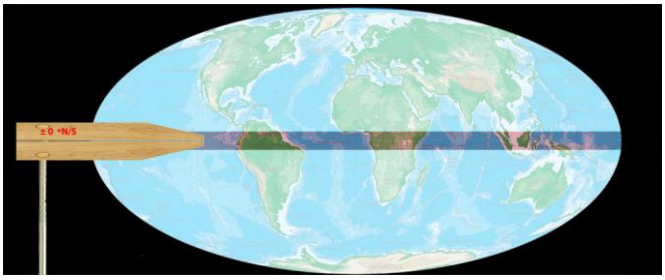
The Vostok Antarctic Ice Core data[9] provides a view of the past 422,800 years of global temperatures. I sorted the Vostok Antarctic Ice core data into 4228 100-year bins and then averaged the bins. Where there was no datum in a bin, the bin was visually interpolated from the data in adjacent bins. The resulting data distribution is shown in the figure below.



From the "binned" Vostok data and the roaming tendency model above, I generated a video with each of the 100-year-average-temperature bins represented by a single frame; thus, 4228 frames. The video using the more aggressive model runs ~2:54 minutes:

[for the roaming model videl (click here)](#).

The figure on the right shows maximum global thermal clamping with a few deg N/S roaming.



A FEW THOUGHTS

Garnered while mapping the global free-roaming range from the Vostok Ice Core data

- It is not clear that mankind HAD to originate in Africa, but could very well have been ANYWHERE. The maximum clamp above is NOT necessarily where mankind "originated"!
- It is not clear that "mankind outside of Africa actually was too dumb to have been OUR ancestors - the rationale of those who posit an "alien theory" to give them wisdom.

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- The "jeane"* pool of modern man is said to have come from the equator region of Africa[10], but there are opponents of this theory[11]
  - Clearly, the "jeane" theory demonstrates the ability of mankind, as an animal, to procreate, to produce huge numbers of their kind as new lands open-up with global warming, and to in-breed with the "local" - note that there are 3 "permanent" (equatorial) "jean" pools: Andes/Amazon, equatorial Africa, and "Java-land"
- The "jeane" pool moves mainly N/S as the clamp is lessened; then E/W
- Measuring "jeanes" simply maps the movement of "jeanes"; Neanderthals are now said to have even gotten together with the Asians at some point[5].

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- The brain (knowledge) pool of mankind resides with those who remain in the cooler (temperate) zones and learn to cope with the environmental conditions! This provides the jump-start on the next technological advancement of mankind; just how big the jump-start will be depends on the amount of technology not lost by the time the perigee is passed
  - Most hearty mankind will remain near coastal areas during the big squeezes; thus, Mediterranean Sea, British Isles, Japan, Korea, etc
  - Many low-lying coastal land areas, present during the big squeeze as the oceans drop, disappear as the thermal vise's grip is lessened; thus some underwater city ruins(!)
- The Andes Mountain range is the only significant "cool" (read "coping") zone on the equator
- The brain pool moves mainly E/W[12] with some N/S as the "breeders" pass through; considering the lack of technological advances in equatorial Africa, any brain-pool movement towards that region during the big squeeze is mostly lost as procreation takes top billing for 40,000 generations (!)
- Advances in the "Brain pool":
  - How: visual (copy), verbal, written
  - Speed: foot, animal-assisted, "raft/boat/ship", wheel (wagon, auto/truck), plane, wire (tele, internet)
  - Thinking (what-if): isolated, encourage, facilitated, glorified; mother-of-inventions

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- Common theory has Asians coming to North America over the Bering Straits (at the Arctic Circle, 66.6 deg N) during a glacial period when the sea water levels dropped enough to form a land-bridge[13]. Considering that islands in the Bering Strait are only ~25 miles from either continent, it seems quite reasonable that adventuresome explorers would devise some way to cross the water when the temperature of the earth was higher and more hospitable and there was likely significant free-range (warmer) movement! There are also sea route theories and, of course, fishing instead of hunting the wooly[13,14].

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* **jeane** is a common name in the USA for a girl/woman. It is used in this paper as a double entendre to tie together the relationship between genes and eve in the out-of-Africa theory.
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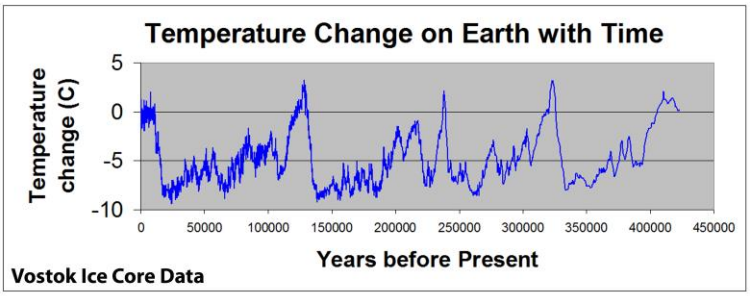
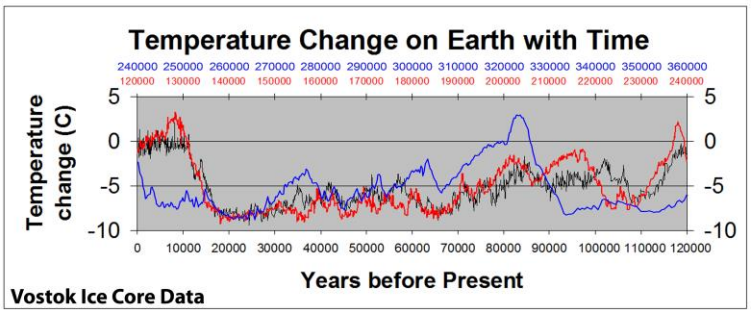
- Considering the ocean-currents, the time (10s to 100s of centuries!) for which only ±10-20 deg latitude are "free" for movement, mankind's tendency to procreate, and mankind's adventuresome nature, movement E/W in the near equator zone seems highly likely. "Raft/boat/ships" would not have to be high tech!

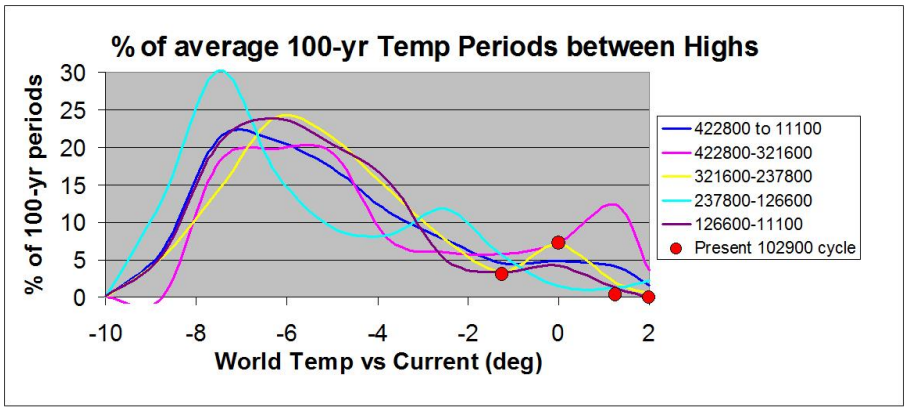
Where are we Now in the Thermal Vise?

The cyclical nature of the global thermal data is highlighted in the lower figure on the right.





The percentage of each of the 12 "free-range roaming" regions for each of the ~100,000-year high-to-high temperature segments is given in the Appendix. That data is presented in graphical form in the figure on the right. The results should be "chilling"!



The last 11100 years have consumed almost all of the warm temperatures for the next cycle. With 89% of the current ~100,000-year cycle remaining, global temperatures will get colder and downright raw at the cycle's perigee(s). The global thermal clamp will continually put more restrictions on agricultural crop (food) production. Concern about global warming is interesting in that "global warming" will actually prolong the current thermal regime! 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"!

Can Mankind Really Expect To Tame Earth's Climate And Remove It From Cosmic Control? [15]

Claim[16]: "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.

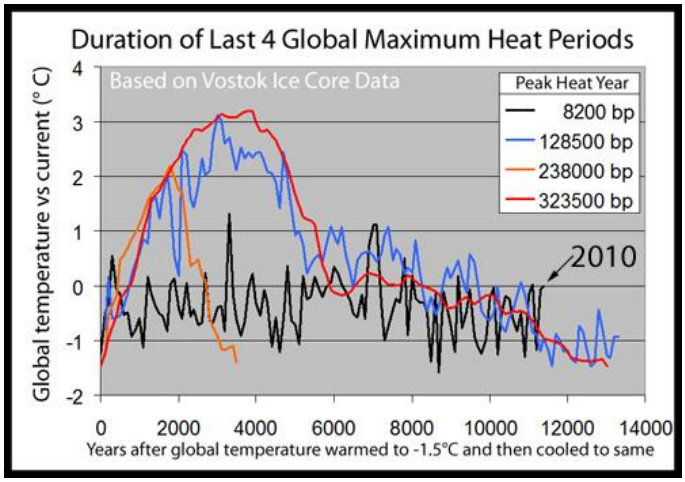
Cleaning up the environment to make life livable is one thing: for example, cleaning up the air in steel mill towns and that emitted from uncontrolled, coal-fired, electrical generating stations and the water in streams in mining areas, etc. Controlling the climate of the earth is a bit "bigger" task! And as John Bartlit[17] of NM Citizens for Clean Air and Water has pointed out, who gets the favorable climate at the expense of the rest?

Seems like the short-term version of climate change is what these "scientific" folks are concerned about. Actual long-term data for 100s of centuries(!) indicate that mankind will have quite a battle against the "Big Chill" that lies in front of it!

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

How do these 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 a 100,000 years of cold climate. Droughts, etc now are minor compared to what mankind will face down the road.

What I see is that the advocates of humans making climate changes 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*[18] highlights some of the presentations given in the conference held in Santa Fe this past weekend. Knowing how to create some warmth may 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 current global periods of temperatures start at 1.5°C below the current level and continue until they drop down to that level. The rise is rapid, whereas the fall is slow. Based on the two broad heat periods, we are nearing the end of our current warm period.

Readers might want to acquaint themselves with the broad picture as well as the short-term "pitch" of "Global Warming". Mankind's recorded history only covers a few millennia and the temperature changes during this period have been minor compared to those over a millennia of millennia! By and large, we think about today, tomorrow, next week and maybe some decades into the future.

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, extremely long 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?

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 the graph that represents changes over centuries. **Do current models**, such as the "Global Change Assessment Model"[19], 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. What does the comment[20] 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"? 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, ...

Appendix

Distribution of 100-year average global temperatures[9] relative to current temperatures.

Number of Free range regions by 100-yr segments in hi to hi global temperatures												
Yrs before now	**-10**	**-8.75**	**-7.5**	**-6.25**	**-5**	**-3.75**	**-2.5**	**-1.25**	**0**	**1.25**	**2**	**sum**
422800-321600	0	0	183	200	195	78	61	59	74	125	37	1012
%period	0.0	0.0	18.1	19.8	19.3	7.7	6.0	5.8	7.3	12.4	3.7	
%total span	0.0	0.0	4.4	4.9	4.7	1.9	1.5	1.4	1.8	3.0	0.9	
321600-237800	0	45	120	201	179	120	65	29	59	16	4	838
%period	0.0	5.4	14.3	24.0	21.4	14.3	7.8	3.5	7.0	1.9	0.5	
%total span	0.0	1.1	2.9	4.9	4.3	2.9	1.6	0.7	1.4	0.4	0.1	
237800-126600	0	145	336	186	103	92	132	62	17	14	25	1112
%period	0.0	13.0	30.2	16.7	9.3	8.3	11.9	5.6	1.5	1.3	2.2	
%total span	0.0	3.5	8.2	4.5	2.5	2.2	3.2	1.5	0.4	0.3	0.6	
126600-11100	1	66	237	276	236	179	58	39	49	14	0	1155
%period	0.1	5.7	20.5	23.9	20.4	15.5	5.0	3.4	4.2	1.2	0.0	
%total span	0.0	1.6	5.8	6.7	5.7	4.3	1.4	0.9	1.2	0.3	0.0	
%100-yr average	**0.0**	**6.2**	**21.3**	**21.0**	**17.3**	**11.4**	**7.7**	**4.6**	**4.8**	**4.1**	**1.6**	
11100-present	0	0	0	0	0	0	0	32	75	4	0	1029
% of 102925 yrs								3.1	7.3	0.4	0.0	

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