Uninformed Ignorance and Outright Propaganda in Climate Science, Covid, Energy Issues and the Vote

Bernie McCune CASF Presentation July 16, 2022

Some people have been promoting the idea of controlling human caused events in nature

This idea of human caused and human controlled climate events is flawed in the first place and has some serious unintended consequences. There is an unexplored issue of lack of evidence and therefor lack of scientific basis for these human caused events. A sense of doom over human caused global warming has become a key environmental as well as a political element for developing climate policy

A summary of this net-zero idea

They claim that the main cause of global atmospheric warming is from human emissions of CO₂. Here is a good summary of this growing view and the response to this threat that has been going on for years.

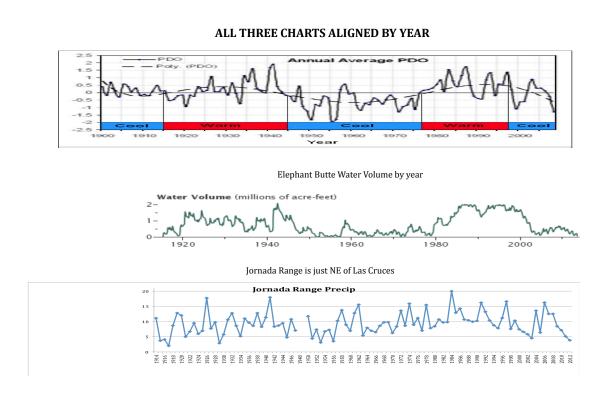
https://quadrant.org.au/magazine/2022/07-08/the-madness-of-net-zero/

However, let's explore some real data points.

Predictions of doom and warming

Almost every prediction of the consequences of warming for the past 40 years, has been shown to be wrong. This whole idea of human caused and human's ability to control the climate has flourished with little challenge. Elements of these weather events promoted as climate extremes have been challenged at every turn by Bob Endlich and other scientists to little avail. Unprecedented and large wildfires, high temperatures, floods, tornadoes, hurricanes and other weather related events are claimed to be from human caused climate change. CASF has shown data and many examples that sun driven natural cycles of the Pacific Decadal and Atlantic Multi-decadal Oscillations are producing 60 year climate warming and cooling cycles.

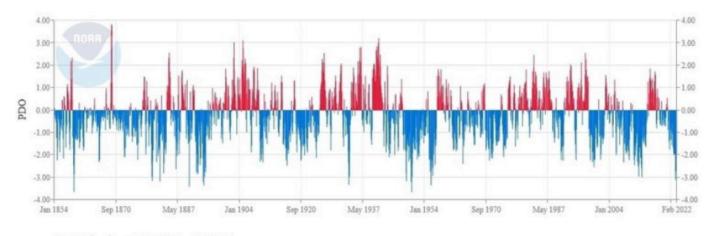
NM Example of the PDO driver of rainfall What does CO₂ have to do with it?



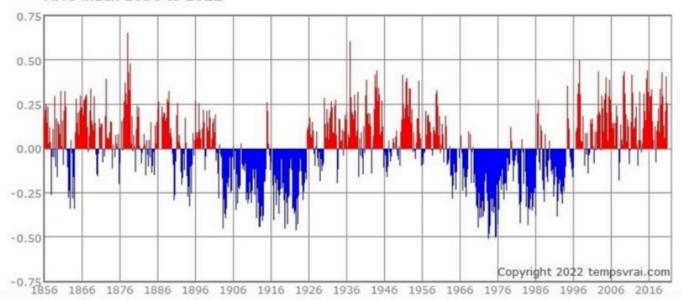
The top plot above is of the PDO (Pacific Decadal Oscillation) from 1900 to 2010, with the middle plot is of Elephant Butte Dam volume in millions of cubic feet per year starting in 1914, and the bottom rainfall in inches at the Jornada Range near Las Cruces. There is good correlation of all three plots. Warm (red) PDO cycles tend to be much wetter showing increased volume of dam water.

The next two plots show the annual PDO and AMO (Atlantic Multi-Decadal Oscillation) Index plots. PDO Index values are an indication of the surface temperatures of mid Pacific ocean (El Nino-La Nina region) while the AMO Index is an indication of the surface temperatures Atlantic Ocean north of the equator. The surfaces of the two oceans have a big influence on air temperatures, rainfall and weather of the surrounding land areas.

PDO warm=rain & cold=drought AMO warm=warm temps





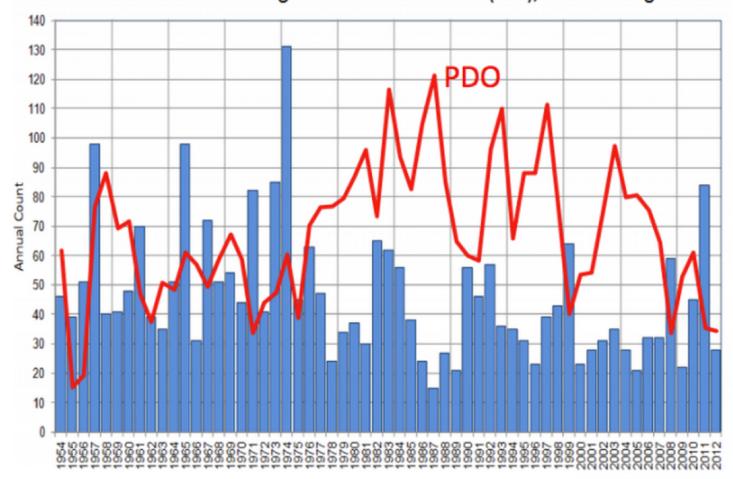


The PDO is mostly an ENSO (El Nino Southern Oscillation) compilation of El Nino and La Nina events over about a 60 year cycle of warm and cold central pacific sea surface temperature measurements. Cold (blue) periods produce droughts while warm (red) periods produce more rainfall.

AMO 30 year warm and 30 year cold events are much easier to see in the above chart. Warm (red) events are directly correlated with warm land temperature periods. Cold (blue) events are correlated with cold land temperatures. A warm period in the US from the 1850s to around 1900 (except for a short cool period from the late 1880s to 1896) is followed by a cool period that lasts to around 1925.

Strong to Violent Tornadoes Occur during Cold PDO not from CO₂ warming

U.S. Annual Count of Strong to Violent Tornadoes (F3+), 1954 through 2012



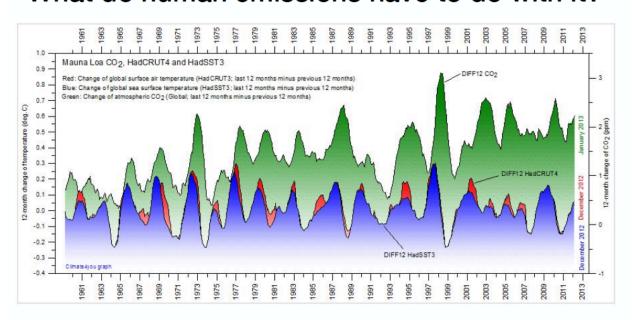
Source: NOAA/NWS Storm Prediction Center

See the strong to violent tornado activity from the mid 1950s until the mid 1970s. PDO was in a cold phase. Atmospheric CO₂ and human emissions grew during the next PDO warm phase that began in the late 1970s until about 2005. During that warm phase the count of strong and violent tornadoes visibly dropped.

Look back at the Elephant Butte Dam graphic and note that during that PDO warm period (about 1976 to 2005) rainfall increased significantly. The Dam filled up.

Henry's Law

What do human emissions have to do with it?

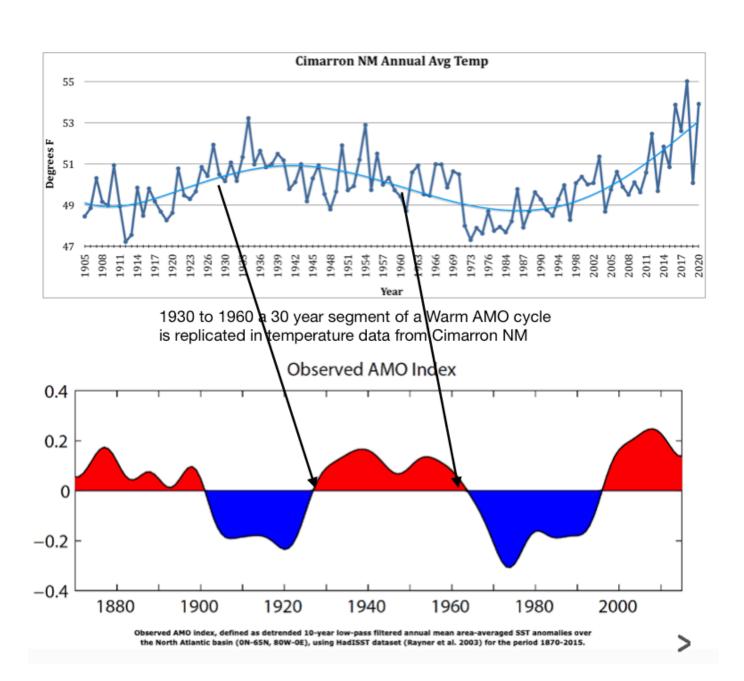


Henry's Law helps us understand that warming of the oceans releases large quantities of CO₂ so that warming increases atmospheric CO₂ rather than CO₂ causing warming

HadCRU Ocean temperatures (blue) and land temperatures (red) are shown to "lead" increases in atmospheric CO₂ which is proof that atmospheric CO₂ is not causing warming of the oceans or

atmosphere. Human emissions are much smaller than ocean emissions so as not to be clearly measurable or visible in any of the plots.

And close to home we have a rural NM site Cimarron NM with a long temperature record. There are some cool and warm periods in this record that cover two cycles of the AMO. PDO cycles show us NM wet and dry periods (about 30 years each with the



total cycle of about 60 years). The AMO cool and warm periods, directly affect NM temperatures.

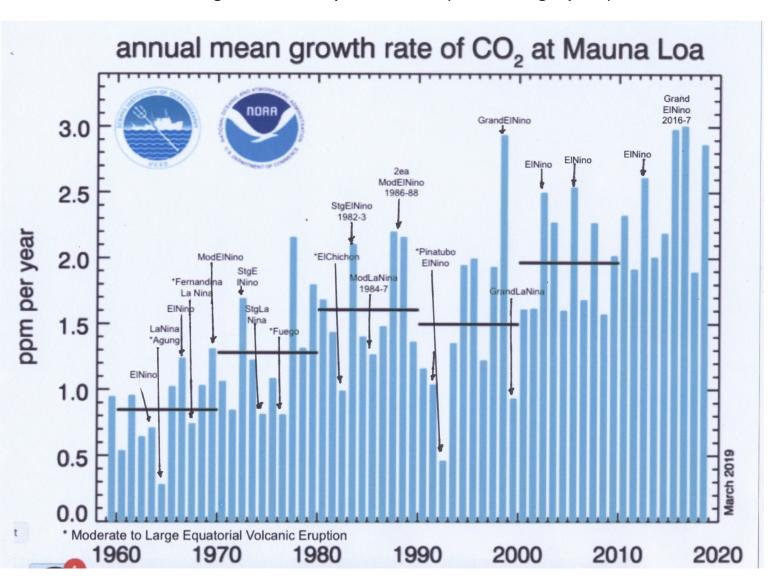
Cimarron is still a rural site today so Urban Heat Island (UHI) effects are not likely to affect even the recent record. Note that the temperature data is the average actual annual record. There are 5 to 7 year short term fluctuations as well as the long term 60 year single cycles of the AMO. Red is warm and blue is cool. Over the past 140 years there have been almost 2.5 AMO cycles. The coolest average annual temperatures were near 47° F and the warmest average annual temperatures were near 53° F and once at 55° F. That 8° F difference is well above any claim of climate warming that alarmists are worried about. Of course the average difference is basically zero where the alarmists are predicting an increase of up to 4° C in the next 80 years or so. With a zero trend in the past 100 years it seems unlikely that their prediction will come to pass.

Is Climate disaster near?

I think the increasing evidence noted above indicates clearly that -NO- not likely with almost zero trends. And the alarmists lack of evidence at every turn bodes ill for them. All they have are some flawed models that are based on so-called CO₂ forcing. In fact they tell everyone that there is no evidence that the sun and nature actually controls the climate. I have already offered plenty of evidence that they do and more follows. Can they prove their case using only models?

More evidence

The only measurable effect of increasing atmospheric CO₂ is the greening of the planet even in desert areas. Satellite data indicates that this greening has increased by 5 to 10% over the past 3 decades. There are annual natural events that drive small annual changes in atmospheric CO₂ (see next graphic).

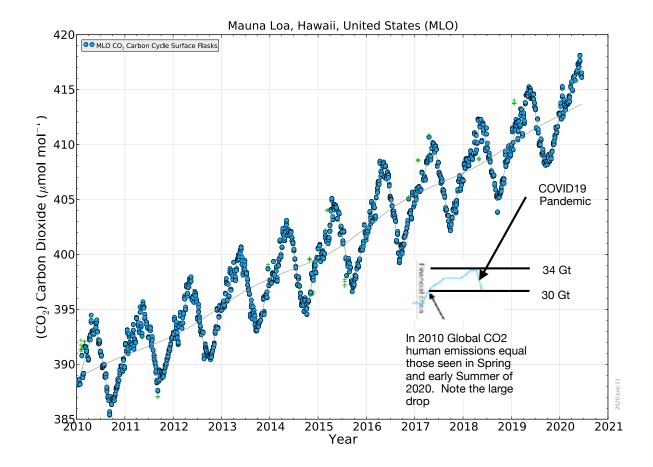


Volcanic and ENSO events either change solar insolation and cool or warm the oceans which allows CO₂ to either enter or leave the atmosphere over the short term. During 2020 and the pandemic, human emissions dropped by more than 4 gigatonnes which should have made at least a glitch in the 2020 Mauna Loa plot.

Every one of the above annual atmospheric CO₂ 1 to 2 ppm fluctuations are mostly being caused by either volcanic eruptions or annual El Nino and La Nina events. Both of these causes are from natural activities. The 1 ppm drift from the 1960-1970 baseline to the 2000-2010 baseline is probably from the natural increase of about 2° C that has occurred as we come out of the Little Ice Age that was ending about 300 years ago. It is really impossible to try to determine what human emissions might be doing to atmospheric CO₂.

But take a look at the next graphic.

Also see consistent natural fluctuations of annual atmospheric CO₂ of about 10 ppm due to winter summer global plant life activity. Human emissions in 2010 were about 30 gigatonnes but by late 2019 were at 34 gigatonnes. During the spring to early summer of 2020, human emissions dropped significantly to 30 gigatonnes (or equal to the emissions in 2010). There is no visible drop in the Mauna Loa atmospheric plot of CO₂ to be seen in 2020. From this I would conclude that all natural sources of atmospheric CO₂ simply swamps any human sources of this gas that is actually plant food. But if you have been paying attention, what does CO₂ have to do with warming anyway? I will continue with the idea that natural and/or human CO₂ is not warming the planet.

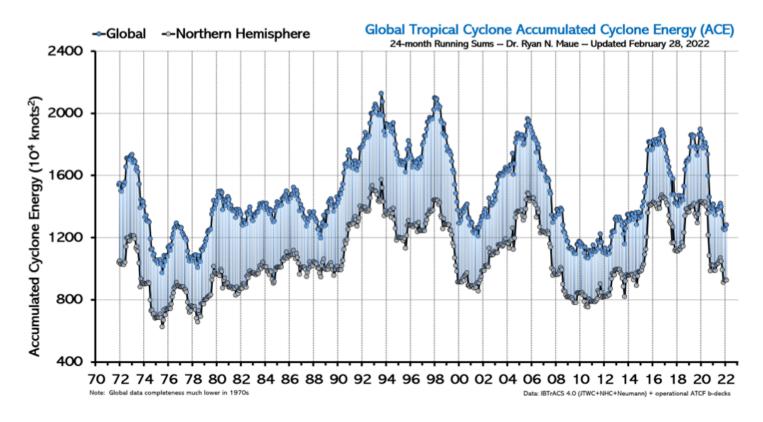


If human CO2 emissions rather than outgassing of CO2 from the oceans dominated the atmospheric CO2 content a drop in human emissions of 4 Gt would have dropped atmospheric ppm from 415 ppm to 395 ppm. Clearly there is no visible effect on the plot so that natural atmospheric changes dominate human changes in emissions to the point human emissions seem to have no visible effect.

Hurricane ACE is Fairly Flat (seems to follow AMO pattern)

This ACE data covers only 50 years which is not a full AMO or PDO cycle but regardless of that the average global and northern hemisphere accumulated cyclone energy (hurricanes) is clearly very flat with no periods that are much more than a year or two of dramatically high or low activity. Thus there is no global warming causing unprecedented extreme events. Whether from CO2 or any other green house gas.

Global & Northern Hemisphere Hurricane Activity

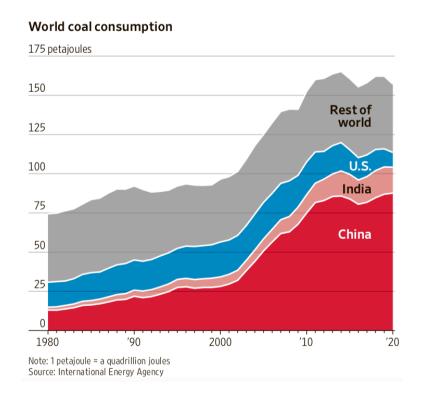


Unintended Consequences of Demonizing CO₂

Trying to replace a reliable fossil fuel based energy supply with a very unreliable wind and solar system is proving to be very costly and environmentally unfriendly. Decades of development and trillions of \$ in subsidies have not improved the wind and solar share of the supply much beyond 3%.

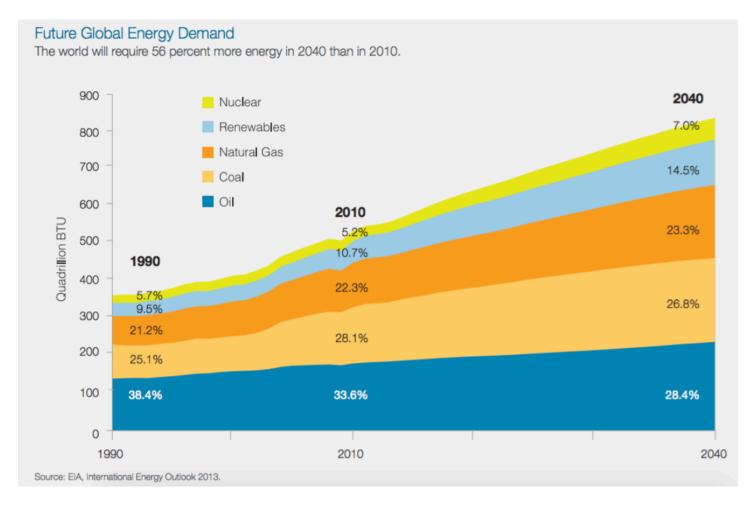
The hope of raising the share from 3% to even 40% is fraught with many economic and environmental consequences. If batteries are the hope of improving solar and wind reliability, physics limitations as well as environmental consequences will be some major hurdles to overcome.

See the more realistic view of the EIA on where fossil fuels and the alternates will be in 2040 (note % drops while total quantities increase - future energy demand is huge). And look what coal use has actually been for the past two decades.



Clearly China caused that two decade rapid increase in global coal usage. Without it, global use would have been close to flat. But Germany, Japan, India and Africa may keep up the growth over the next two decades perhaps at the same rate as in the recent past.

The following is a more realistic view of energy usage and note the increase in demand of 56%. All renewables (including hydro, geothermal, wood, etc) with wind and solar will makeup 14.5% of energy demand in 2040. So wind and solar may increase from 3% to 4.5 or 5%. But fossil fuels will increase by their BTU values if not their % values. Natural gas demand will increase 1% in 20 years. And see another realistic (especially due to recent energy events) almost 2% increase in demand in the nuclear segment.



What do Mark Mills, Mike Schellenberger, Bjorn Lumborg and Patrick Moore have to say

The points they make are mostly green and it has nothing to do with global warming or CO₂.

See for yourself what Mark Mills and Patrick Moore have to say

https://www.facebook.com/dalegasandoil/videos/unobtanium/308699784174165/

https://energynow.ca/2019/05/a-must-watch-dr-patrick-moore-co-founder-of-greenpeace-discusses-why-simple-science-made-him-leave-greeenpeace/

Mike Schellenberger is also an environmentalist who worries about what the so-called green energy solutions will do to the planet.

If you read your homework, Lumborg's analysis was there.

Schellenberger's Views

Schellenberger has great concern about ecological disruption of large portions of the surface of the earth and what it will do to significant portions of global wildlife. He has calculated that present energy production which is heavily supported by fossil fuels disrupts only 0.5% of the land. Replacing that same energy production level with wind and solar will disrupt 25% of the land and will grow even bigger than that when our energy needs increase 56% in the next 20 years. He has documented how wind turbines are killing millions of birds each year many of which are threatened and endangered species. Consequences for very biodiverse desert, forest and wilderness areas will clearly be severe.

Present Earth Use Facts

Water covers 70.8% (361.132 million km²) of the globe and Land 29.2% of the globe (148.94 million km²).

Of the 29.2% of the global land surface noted above, Arable Land is 10.6% of that land (Annual Crops make up 4.71% of the 10.6% arable land)

Permanent Pastures 26%

Forests and Woodlands 32%

Urban and other areas disturbed by humans 2.4%

Other 29%

Majority of above data based on CIA World Factbook

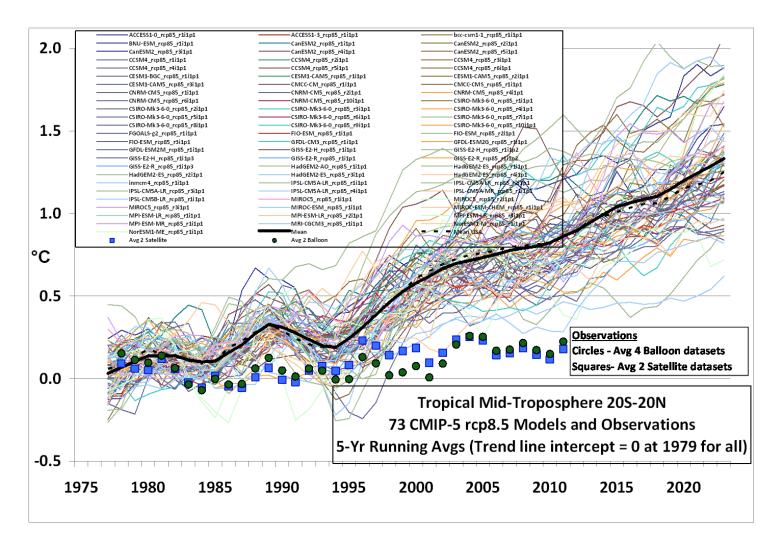
Environmentalists, even today, complain about the large human disruption of the land when, as noted above, we presently use only about 2.4% of all the land for our houses, cities, industrial developments, parking lots, roads, etc.

The Alarmist fairy tale of CO₂ as a climate changer Model Failure

Climate Models assume that CO_2 has a discernible role to play in increasing global temperatures. Clearly the models using these CO_2 forcing numbers are running hot and are well above actual global temperatures with trends to $+4^{\circ}$ C in the next 50 years

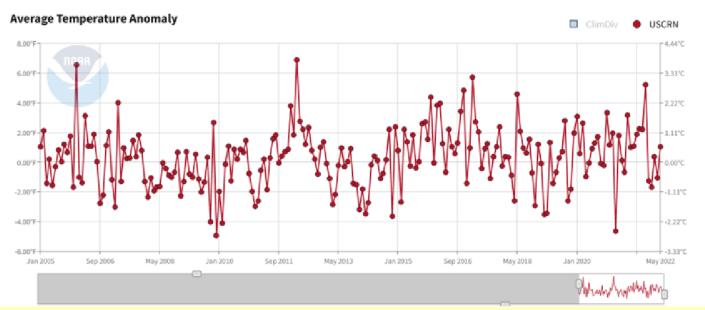
Note in the next slide that the real data given by black dots (balloon data) and blue squares (satellite data) are well below predicted temperature levels and are mostly flat for almost 5 decades (to about 0.2° C at most).

In the same 5 decades the models predicted an average of about 1.5° C increase in temperture. Predicted warming of 1 C in 50 years (to the present time) and some modelers are predicting an additional 3° C in the next 50 years. When I suggest model failure, is there any doubt? Their predictions from the 70s have already failed and still they claim we will warm even more.



And the incomplete data for the past 15 years is supplied from a new US set of instrument sites that are located in very rural conditions. One of those sites is out at the Jornada Experiment

https://www.ncei.noaa.gov/access/monitoring/national-temperature-index/time-series/anom-tavg/1/0

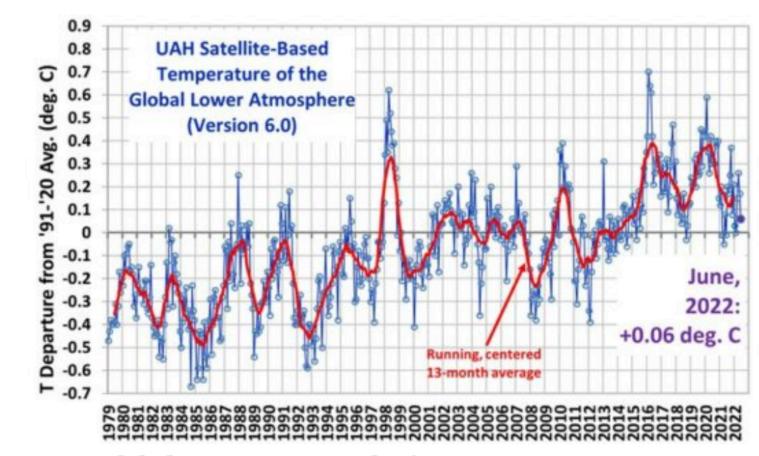


Plot of the USCRN data set for the entire time domain, over 15 years, from Jan 2005 to May 2022. This is a fairly short time period, a little over 15 years.

Station NE of Las Cruces that are definitely not near the city. There are over 100 of these sites that were expressly developed recently to intentionally make weather/climate measurements that are not affected by human activity.

The above plot is the averaged temperature anomaly data from 2005 to 2022 for the full US Climate Research Network (USCRN). Looks pretty flat to me. Again what does CO₂ have to do with any of it?

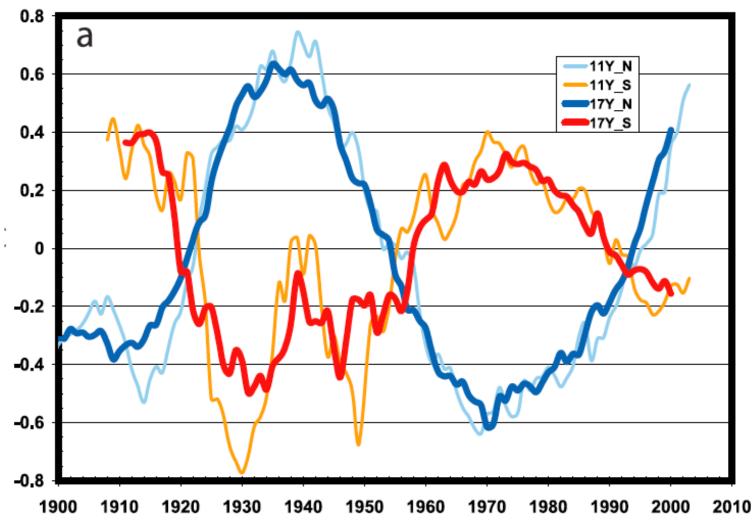
The next data set is the satellite derived global temperature data from 1979 to 2022. There is a big natural warming event that stands out in the middle of the graph which is the 1998 super El Nino.



Latest Global Average Tropospheric Temperatures

The above plot is a 40 year set of data (versus the full 60 year cycle) which looks a lot like the middle of an AMO cycle cool to start, neutral early 2000s and warm at the end. It chopped the warmth of the 40s 50s and 60s and the cooling of the 2020s and 2030s. We shall see what the next couple of decades bring.



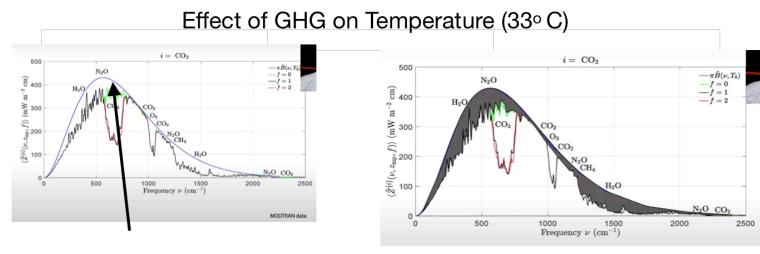


And all the ice at the poles is melting and the Arctic was predicted to be ice free by now. I don't think so. Petr Chylek of Los Alamos had a theory and collected data to show a north pole

(blue) south pole (red) see-saw. The Arctic is warming since the 1970s but at the same time the south pole now is cooling. He has never been so bold to say that either pole will completely melt or melt by too much at all. He just wanted to show a 60 year or so warming (30 years) and cooling (30 years) patten.

There certainly is no sign of an increasing atmospheric CO₂ pattern here.

And the final nail in the alarmists coffin is the atmospheric physics of green house gases shows that once the atmosphere is saturated with the various GHGs more will have almost no further effect on the warming of the planet. Indeed, with no atmosphere, the earth's temperature would be about -18° C on average. So it is good that some H₂O, CO₂ and other gases are in our atmosphere. Will we fry from more of them going into the atmosphere - NO. See for yourself:



Energy Escaping to Space based on Stefan-Boltzmann Eq.

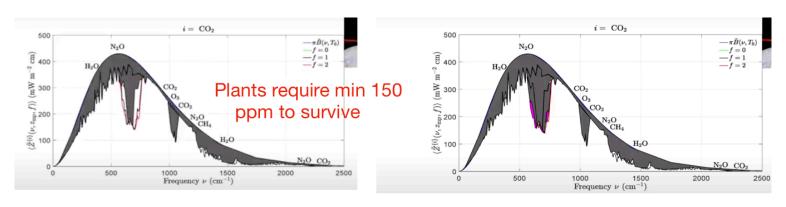
Only H₂O GHG = 25° C

The smooth curve noted by the arrow in the figure to the left shows the energy that is affected by the earth's atmosphere and the combination of gases found there.

The right hand figure shows the effects of water in the atmosphere on the temperature. The earth's average temperature without any atmosphere would be -18 deg C.

With only water in the atmosphere the temperature would have increased by 25 deg C (or 25 - 18 = 7 deg C of average temperature).

Now let's saturate the area under the curve with other gases. Right now there is only about 1.7 ppm of methane (CH₄) in the atmosphere. That may double in the next 100 to 200 years but the effect from that tiny amount on any of the parameters including warming is of little consequence.



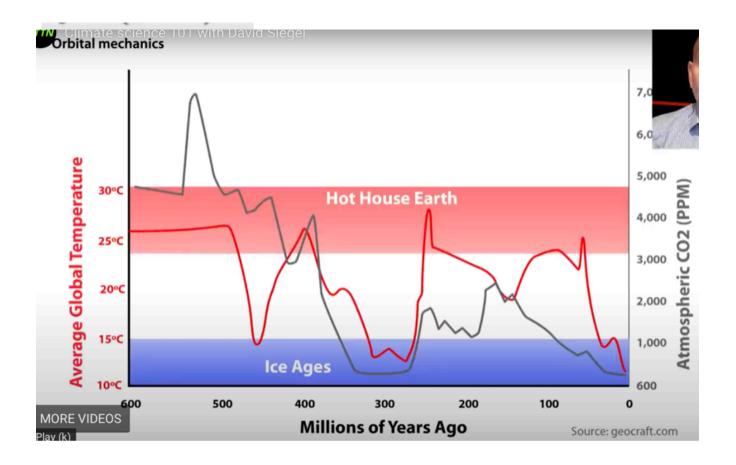
Add 50 ppm CO₂ and All O₃ (Ozone) which adds about 4° C and about 2° C

400 ppm CO₂ (in gray) which adds about 1 C and 800 CO₂ (in color) and add less than 1 C

In the left hand figure above if you add 50 ppm of CO2 and all the Ozone to the earth's atmosphere, the temperature would increase 6 deg C (4 deg from CO2 and 2 deg from Ozone). The average temperature of the earth would then be 13 deg C (7 deg from water plus 4 deg C from 50 ppm CO2 and 2 deg C from Ozone).

By adding 400 ppm CO2 in the right hand figure (in gray) another deg C is added to the total average and when that is doubled to 800 ppm (small colored area) just short of another deg C is added, making the total earth average temperature 15 deg C. Basically the atmosphere is saturated at this point.

So even at the present level of 418 ppm, CO₂ can no longer have much effect of the warming of the planet. We will see that even at much higher levels of CO₂ we have been in both cold and hot conditions. And that we are now actually in moderate glacial condition.



Look at the effects of Hot House Earth and Ice Age Earth and the related average temperatures through the ages. See the large CO₂ spike at 550 million years ago. Life was just beginning and plant life had not been able to deal with the early thick CO₂ atmosphere.

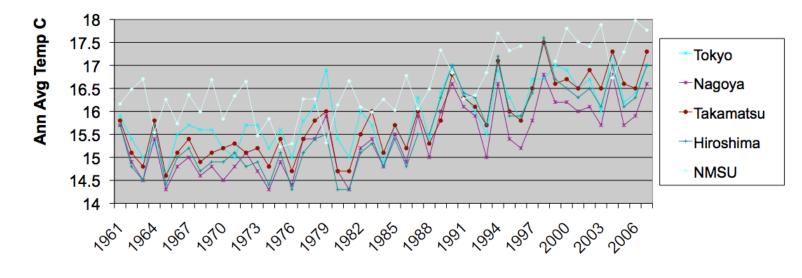
See how temperatures are not really controlled by CO2 (in fact they sometime follow a CO2 decrease by millions of years). Dinosaurs showed up around 200 million years ago and disappeared about 66 million years ago. As noted in the previous discussion our average temperature is now about 14 or 15 deg C and we are in an ice age with CO2 concentration at about 400 ppm (about the least ever seen). Actually 1000 ppm of CO2 or much more is much more likely to be seen. Presently we are located at the lower right hand corner of the graph but we are at an average of about 15 deg C so we are definitely nearer the colder part of the chart. It is likely that some warming would be of little consequence.

And I suspect that 1000 ppm of CO₂ would not be a bad place to be since plants love the stuff.

A final more complex view

First note that the average Japanese temperatures beginning in 1961 average about 15° C, so perhaps some of the previous estimate of our condition in the big picture may not be too far off.

Four Site Japanese Annual Avg Temp + NMSU



Year

What to look for here is that half way around the globe from NMSU (pale colored plot) are sites in Japan the show very similar average temperature patterns. They show similar variations such as 5 to 7 year spikes and similar synchronized amplitude variations of a degree or two C. But at the same time over 30 years they seem to have the same synchronized AMO pattern of cool to warm and so on. Not sure what is going on there.

The difference between NMSU and all the similar Japanese plots is that they seem to look very similar but completely out of sync (180 deg).

Conclusion

I did not say much about Health or Vote problems but much of what has gone on in the Climate battles is true for Health and Votes

Most points about lack of evidence in climate discussions holds true in health and vote issues. Just because many politicians and media experts have not encountered any evidence of problems with the CDC approach to the pandemic and NO one seemed to think that there was anything wrong with vote (there was no evidence).

My question involves all the serious late night glitches in the count and question of stuffing ballot boxes. See Bob's CASF presentation on all the evidence:

https://casf.me/wp-content/uploads/2021/01/Election-Fraud__-29_Dec__2020-rev-3-Jan-2021.pdf

Just as in the climate discussions, if you do not look for evidence or if you ignore evidence then that must be proof enough.

Really?

If CO₂ is not a problem, we need to stop acting as if it is. And we need to deal with real problems one of which is the media and some politicians continually "leading us down the garden path".

"Consensus views are as much about faith as is any religion".

Warren Buffet is buying into Ocidental Petroleum. What does he know that Biden doesn't? Probably quite a lot.

Some interesting material concerning Wuhan

Dr. John Campbell is an interesting interloper in the Wuhan discussions. Watch some of his YouTube videos for yourself (there are many dozens of them by now). His thinking is somewhat out of the box while at the same time he uses a series of scientific papers that he has found to present a reasoned point of view.

https://www.youtube.com/watch?v=kkjBi7dOTAg

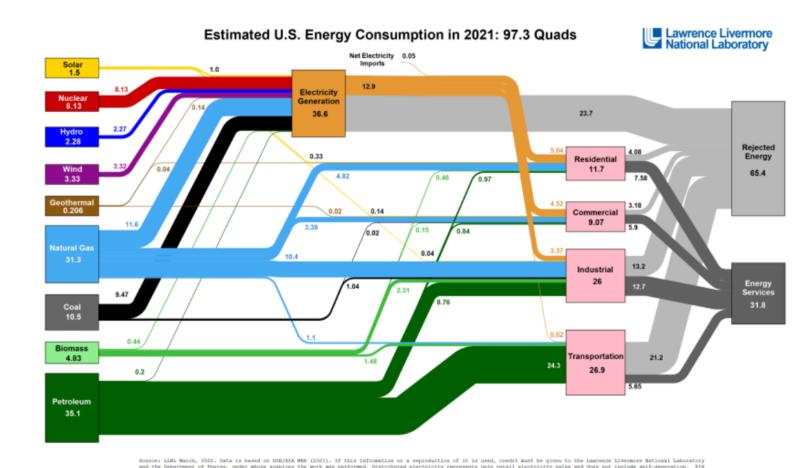
https://www.youtube.com/watch?v=1xy9BAbH2BA

https://www.youtube.com/watch?v=E1GF0H9V_1g

In doing some added research on lockdowns, I found some more solid data there. It is clear that our US Public Health support is woefully inadequate and completely unprepared for the next pandemic. This material shows this but it also begs we do a lot more to prepare for the future.

A Snapshot of US Energy Use

And here is view of US Energy for 2021. Fossil fuels supplied almost 80% of our needs last year.



About 2/3 of the energy we used last year was "rejected energy" or wasted. Perhaps we can work on more efficient use of what we already have and actually have "energy services" (now at less than 33%) give us back 5 or 10% of wasted energy being burned today.

And finally I found an article about base load grid support that is very important. I will add it to the bits and pieces I am sending out with all this.