Recent Words from Richard Lindzen with Comments by Bob



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Cruces Atmospheric Sciences Forum

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How the materials will be displayed

Dr Lindzen's words and materials have this color ... from MIT

My materials have this heading color

Some material has been edited slightly, both for emphasis and to make it display better in this format

Dr Lindzen's thoughts discussed here come from these two sources on our Web Site

https://casf.me/the-imaginary-climate-crisis-how-can-we-change-the-message/

https://casf.me/wp-content/uploads/2022/12/2022-09-22-Lindzen-globalwarming-narrative.pdf



https://www.climatedepot.com/2022/12/04/mit-climate-scientist-dr-richard-lindzen-condemns-climate-change-fears -as-a-quasi-religious-movement-predicated-on-an-absurd-scientific-narrative

Bottom line up Front!

MIT climate scientist Dr. Richard Lindzen rejects 'climate change' as 'a quasi-religious movement predicated on an absurd 'scientific' narrative'



Dr. Richard Lindzen's new paper: An Assessment of the Conventional Global Warming Narrative - Published by the Global Warming Policy Foundation - September 22, 2022: Climate change is "a quasi-religious movement predicated on an absurd 'scientific' narrative. The policies invoked on behalf of this movement have led to the US hobbling its energy system." - "The Earth's climate has, indeed, undergone major variations, but these offer no evidence of a causal role for CO₂."

"Unless we wake up to the absurdity of the motivating narrative, this is likely only to be the beginning of the disasters that will follow from the current irrational demonization of CO₂."

Dr Lindzen's Biography

Dr. Richard S. Lindzen, Professor Emeritus of Atmospheric Sciences in the Department of Earth, Atmospheric and Planetary Sciences at the Massachusetts Institute of Technology, is a specialist in Atmospheric Physics. Dr. Lindzen received his BS in Physics in 1960, & his MS (1961) & PhD (1964), both Applied Mathematics, from Harvard University, but his thesis (Radiative and photochemical processes in strato- and mesospheric dynamics.) was in Atmospheric Physics. From 1968-1972 he served on the faculty of the University of Chicago. From 1972 to 1983 he held the Gordon McKay and then the Robert P. Burden chairs in Meteorology at Harvard University where from 1980 until 1983, he was Director of the Center for Earth and Planetary Physics. From 1983 until July 2013, he was the Alfred P. Sloan Professor of Atmospheric Sciences at the Massachusetts Institute of Technology. He was a lead author of the 2001 Scientific Assessment Report of the Intergovernmental Panel on Climate Change, and a member of the Climate change science Program Product Development Advisory Committee of the Department of Energy (term ended in 2009). . He has served as a member of the Woods Hole Oceanographic Institution Corporation and the Council of the American Meteorological Society. He received the Leo Prize of the Wallin Foundation in Sweden (2006), the Distinguished Engineering Achievement Award of the Engineers' Council (2009), and the Petr Beckmann Award of Doctors for Disaster Preparedness (2012). He has published over 250 peer-reviewed scientific papers. He is a Fellow of the American Meteorological Society, the American Geophysical Union, and the American Association for the Advancement of Science, and a member of the American Academy of Arts and Sciences, the National Academy of Sciences, and the Norwegian Academy of Letters and Science.

Richard S. Lindzen, Professor Emeritus of Atmospheric Sciences, MIT:

"For about 33 years, many of us have been battling against climate hysteria. We have correctly noted:

- The exaggerated sensitivity,
- The role of other processes and natural internal variability,
- The inconsistency with the paleoclimate record,
- The absence of evidence for increased extremes, droughts, floods, wild-fires, etc.

We have also pointed out the very real benefits of CO2 and even of modest warming. And, as concerns government policies, we have been pretty ineffective. Indeed, our efforts have done little other than to show (incorrectly) that we take the threat scenario seriously...I want to make a tentative analysis of our failure." "In punching away at the clear shortcomings of the narrative of climate alarm, we have, perhaps, missed the most serious shortcoming: namely, that the whole narrative is pretty absurd.

Of course, many people (though by no means all) have great difficulty entertaining this possibility.

They can't believe that something so absurd could gain such universal acceptance."

Bob Comment: The Climate Narrative is absurd, but it takes BOTH education and critical thought to see this.

Consider the following situation:

Your physician declares that your complete physical will consist in simply taking your temperature.

This would immediately suggest something wrong with your physician.

He further claims that if your temperature is 37.3C rather than between 36.1C and 37.2C you must be put on life support.

Now you know he is certifiably insane.

The same situation for climate (a comparably complex system with a much more poorly defined index, globally averaged temperature anomaly) is considered 'settled science.'

In case you are wondering why this index is remarkably poor.

I suspect that many people believe that there is an instrument that measures the Earth's temperature.

As most of you know, that is not how the record was obtained.

Obviously, the concept of an average surface temperature is meaningless. One can't very well average the Dead Sea with Mt. Everest.

Instead, one takes 30-year annual or seasonal means at each station and averages the deviations from these averages.

The results are referred to as annual or seasonal mean anomalies.

The Figures show 30-year annual or seasonal means at each station and averages the deviations from these averages.

The results are referred to as annual or seasonal mean anomalies.

Figures are from <u>https://co2coalition.org/wp-content/uploads/2020/12/Global-Mean-</u> Temperature-Anomaly-Record_12.08.20.pdf

Station data are in black and the mean anomalies in orange. The spread of anomalies is much larger than the rather small range of change seen in the average. While the average does show a trend, most of the time there are almost as many stations cooling as there are stations warming. That is to say, the average offers little guidance for specific locations. Each vertical plot is a series of black circles...

When plotted, the circles look like a black line, because there are 3,000 stations plotted, every year.



Fig 1. <u>Annual temperature anomalies at individual stations (degrees Celsius, black circles)</u>

Fig 1a. <u>Annual</u> temperature anomalies at individual stations (degrees Celsius, black circles)



"Station data are in black and the mean anomalies in Yellow. The spread of anomalies is much larger than the rather small range of change seen in the average. While the average does show a trend, most of the time there are almost as many stations cooling as there are stations warming. The average offers little guidance for specific locations."



Figure 2. <u>Seasonal</u> temperature anomalies at individual stations (degrees Celsius, black circles)

Figure 2a. <u>Seasonal</u> temperature anomalies at individual stations (degrees Celsius, black circles)



"Station data are in black and the mean anomalies in Orange. The spread of anomalies is much larger than the rather small range of change seen in the average. While the average does show a trend, most of the time there are almost as many stations cooling as there are stations warming. The average offers little guidance for specific locations."



Figure 3. BEST seasonal global temperature anomalies (degrees Celsius)



Fig 4. Temperature changes people know how to handle



The thickness of the black line represents the total change in global mean anomaly over the past 120 years. Although this change was accompanied by the greatest increase in human welfare in history, we are told that its increase by about 30% will represent doom.

And, in case this situation isn't sufficiently bizarre, there is the governmental response.

It is entirely analogous to a situation that a colleague, Bruce Everett, described.

After your physical, your physician tells you that you may have a fatal disease. He's not really sure, but he proposes a treatment that will be expensive and painful while offering no prospect of preventing the disease. When you ask why you would ever agree to such a thing, he says he just feels obligated to "do something".

That is precisely what the Paris Accord amounts to.

However, the 'something' also gives governments the power to control the energy sector, and this is something many governments cannot resist.

Information is unlikely to change this despite the fact that even the UN's IPCC acknowledges that their warming claims would only reduce the immensely expanded GDP by about 2-3% by the end of the century – something that is trivially manageable and hardly 'existential.'

Lindzen on The Elites

1. Elites are always searching for ways to advertise their virtue and assert the authority they believe they are entitled to.

2. They view science as a source of authority rather than a process, and they try to appropriate science, suitably and incorrectly simplified, as the basis for their movement.

3. Movements need goals; these goals are generally embedded in legislation.

4. The effect of legislation long outlasts the alleged science.

5. As long as scientists are rewarded for doing so, they are unlikely to oppose the exploitation of science.

Virtue Signaling in Las Cruces is alive and well!

Photo taken mid-day 16 Dec 2022 on the west side of the Las Cruces Museum of Nature and Science.

Winds were brisk enough to have Old Glory and the state flag of New Mexico flap in the breeze, but the wind turbine did not budge in the 5 minutes or so I was taking photos.



https://en.wikipedia.org/wiki/Quietrevolution_wind_turbine

"...However, the qr5 did not perform well enough to ensure the original company's success, and it went into administration in 2014."

Seven qr5 turbines were erected in 2012 at the Olympic Park in London in a failed attempt to generate on site 20% of the park's post-games energy requirements. The turbines' usefulness was questioned:

they were possibly net consumers of energy.

A public relations setback for the qr5 and original company was the poor performance of the turbine installed at Welsh government offices in Aberystwyth.

The company blamed poor siting for the £48,000 turbine's generation of a monthly average of £5.28 worth of electricity (33 kWh) in 2012



A qr5 turbine at the Colston Hall, Bristol

C.P. Snow's discussion in 1959 of the two cultures suggests why it is the educated elite that is most vulnerable to the absurd narrative.

Snow was an English physicist, novelist, government advisor.

Here is his description of the non-scientific educated elite.

"A good many times I have been present at gatherings of people who, by the standards of the traditional culture, are thought highly educated and who have with considerable gusto been expressing their incredulity at the illiteracy of scientists.

Once or twice, I have been provoked and have asked the company how many of them could describe the Second Law of Thermodynamics.

The response was cold: it was also negative.

Yet I was asking something which is the scientific equivalent of: Have you read a work of Shakespeare's?

I now believe that if I had asked an even simpler question – such as, What do you mean by mass, or acceleration, which is the scientific equivalent of saying, Can you read?

- not more than one in ten of the highly educated would have felt that I was speaking the same language.

So, the great edifice of modern physics goes up, and the majority of the cleverest people in the western world have about as much insight into it as their Neolithic ancestors would have had."

Bob Comment. The reason a "Liberal Arts Education" included mandatory math and science courses is an ideal "Liberal" education "Liberates" the student (and graduate) from that person's own ignorance.

C P Snow made these statements in 1959, when I was a college Freshman. As the Vietnam War progressed, LBJ ramped up the Draft instead of calling up the Guard and Reserves. Many who flunked out & lost their 2S deferment status were promptly drafted, many into the Army, and many of them into the Infantry, soon bound for Vietnam, and many joined the 58,220 lost. After years of fighting a war we were not allowed to win, professors refused to fail poorly-performing students.

Academic Rigor was lost and is the reason so many of today's "Liberal Elites" have gained neither knowledge or the power of critical thinking.

What C.P. Snow failed to note, I think, is that the group he describes is actually aware of their scientific ignorance, and this leaves them very insecure.

This accounts for their need for simple narratives, however wrong. It allows them to believe that they actually do 'understand' the science, and, as we see, they become arrogantly proud of their alleged accomplishment.

Of course, they forget that their ignorance extends to understanding what science actually is. They forget that the opposite of Science is 'The Science'

Bob's Comment: I have seen some of this in their bumper stickers, you probably also have seen similar.



The good thing about science is that it's true whether or not you believe in it. -Neil deGrasse Tyson

> The below bumper sticker really means "I believe in Human-Caused, CO2-Fueled catastrophic Global Warming"



CAUTION: If you don't believe in climate change, my brakes don't believe in friction.



The situation is compounded when one comes to climate, where most scientists are also ignorant, but where their support for the narrative comforts the non-scientists.

On top of all this, I suspect that in a long period of wellbeing, this elite feels the need to show that they too have met challenges – even if the challenges are purely imaginary.

Our task is to show the relevant people the overall stupidity of this issue rather than punching away at details.

In focusing on the details, we are merely trying to showcase our own specialties.

My use of the word 'merely' is probably unjustified; the details can, in fact, be scientifically important.

However, we are not considering either our target audience or the intrinsic absurdity of the issue.

<I think Lindzen here means <u>their argument</u>, not <u>the issue</u>>

It is likely that we have to capitalize on the insecurity of the educated elite and make them look silly instead of superior and virtuous.

We must remember that they are impervious to real science unless it is reduced to their level.

When it is reduced to their level, it is imperative that we, at least, retain veracity.

Whether we are capable of effectively doing this is an open question.

However, at the least, we must stop treating the proponents of <u>climate</u> as an existential threat, as worthy opponents.

Do not ascribe reasonableness to the other side's position. It is not true, and not even plausible.

<! think Lindzen here might mean "Human-caused, CO2-Fueled" climate change>

"... of course, there remains the obvious fact that the proposed policies ignore the agreed conclusion of even the IPCC that nothing done by the US and the EU will have a significant impact on climate.

In a rational world, this would lead to the conclusion that the best policy would be to increase the resilience of the Western World to climate change regardless of its cause. Instead, the proposed policies would leave us more vulnerable.

This strongly suggests malicious intent. This essay provides a curious possibility for this malicious intent.

As I have noted, most ordinary people (i.e., working middle-class people), are sensible enough to not accept the notion that climate is so severe a threat as to warrant policies that while monumentally disruptive, destructive and expensive, will have imperceptible impact on climate regardless of what one believes about climate. "



My explanation of the origin of Global Warming as a fear tactic of the Left: When the Soviet Union Collapsed the Left went into Watermelon Environmentalism: "Green on the outside and Red on the Inside"

The video, "US' Enemies are not going to like this video:" https://youtu.be/_1IBktNzIoE, is a little over 16 minutes long.

Understanding the rationale behind this video explains why Socialists/Communists who hate the USA are using fear of global warming to enable the liberals at home to defeat us from the inside, since defeating us from the outside is so difficult.

One specific example of this hatred of the US comes from the Club of Rome's book, "The First Global Revolution" published in 1991, and from pg 75, this quote, *"In searching for a common enemy against whom we can unite, we came up with the idea that pollution, the threat of global warming, water shortages, famine and the like would fill the bill."*

The word *enemy* is indeed correct.

In the video, there is the understated subtext that North America and especially the USA are the most energy-rich areas in the world today.



The Club of Rome's fingerprints are all over "Global Warming" as an agenda cause.

from Page 75, this smoking gun:

"In searching for a common enemy against whom we can unite<u>, we came</u> <u>up with the idea that pollution, the</u> <u>threat of global warming, water</u> <u>shortages, famine and the like would</u> <u>fit the bill.</u>

...these phenomena do constitute a common threat which must be confronted by everyone together...

...these dangers are cause by *human* intervention in natural processes...

The real enemy then is humanity itself."

The above graphic shows the cover and quotes from the Club of Rome, https://www.clubofrome.org/publication/the-first-global-revolution-1991/
The self-anointed elite, in response, assume the gnostic position of proclaiming exactly the opposite.

I use the word 'proclaiming' rather than 'believing.' Frankly, I don't think they actually believe what they are proclaiming – especially when they buy mansions on the coast.

Rather, they look forward to the pain their policies will cause to a group that they appear to despise. I still hope that this analysis is wrong, but, in today's peculiar world, it seems all too possible.

https://casf.me/wp-content/uploads/2022/12/2022-09-22-Lindzen-global-warming-narrative.pdf

AN ASSESSMENT OF THE CONVENTIONAL GLOBAL WARMING NARRATIVE Richard Lindzen

With a comment by Nic Lewis

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Abstract

The one-dimensional picture of the greenhouse effect and the role of carbon dioxide in this mechanism dominates current depictions of climate and global warming. We briefly review this picture. We then discuss the shortcomings of this approach in dealing with the three-dimensional climate system. One problem is determining what temperature on the real Earth corresponds to the temperature in the one-dimensional treatment. This, in turn, leads to the traditional recognition that the Earth has, in fact, many climate regimes at present. Moreover, there have been profound changes in the temperature difference between the tropics and polar regions over millennia, but at the same time the temperature of the tropical regions has remained little changed. The popular narrative assumes that small changes in the tropics are amplified at high latitudes. There is no basis for this assumption. Rather, the difference is determined by dynamic heat fluxes in the atmosphere and oceans, with the controlling flux due to baroclinic instability in the atmosphere. Changes in mean temperature are primarily due to changes in the tropic-to-pole difference, and not to changes in the greenhouse effect. The stability of tropical temperatures in the face of strongly varying heat fluxes out from those latitudes points to the existence of strong negative feedbacks in the radiative-convective response of the tropics. Finally, we will comment on the so-called impacts of climate change.

Figure 1: Radiative balance for a hypothetical planet.



Although the planet and the sun look spherical, the numbers represent some sort of average, which will, in fact, be applied to a one-dimensional picture. <a href="https://www.selfacture.com/selfactures/like/selfactureselfactures/like/selfactures/like/selfactures/like/selfacture



The characteristic emission level plays a crucial role in the greenhouse effect. Balance is achieved when the temperature at the characteristic emission level is 255 Kelvin (K).

In order to obtain greenhouse warming, one must consider one more process, namely thermal convection. Radiation alone leads to convective instability; the surface becomes sufficiently warmer than the air above it as to lead to convection, which penetrates deep into the atmosphere.



Adding an infrared absorbing gas (i.e., a greenhouse gas) elevates the characteristic emission level and, because of convection, this level is colder than 255K.

In order to reestablish equilibrium with net incoming radiation, it must be warmed back to 255 K, thus raising the temperature of the entire atmosphere below this level.

This is the essence of the so-called greenhouse effect. It is illustrated in Figure 2.

The one-dimensional approach does provide some insights into the gross differences among the various planets in our solar system, and it should be noted that almost all current discussions of global warming are based on onedimensional approach, largely because of its simplicity.

However, as we will see, it is fundamentally inadequate for describing the Earth's complex three-dimensional nature.

Begin with an atmosphere that has a preindustrial value for CO_2 and ask how much warming will be associated with a doubling of that concentration. It turns out that the warming is logarithmic in CO_2 so that each doubling is associated with the same warming.

The contribution is about 3.5W/m2, on the order of 2% of the normal flux; it leads to warming of about 1°C. This result is not considered controversial.

Normally, one might consider 2% to be small, since common fluctuations – in upper-level cirrus, low-level clouds, ocean currents, and so on – routinely produce this level of variability in the radiative budget.

In other words, consistent with Le Chatelier's Principle, the climate system is amply capable of opposing such forcing.

Although the gross inadequacy of our understanding of clouds and other factors is openly acknowledged by the IPCC, concerns over global warming are based on what is essentially the assumption that <u>variations</u> in water vapor, clouds, and so on act to amplify rather than oppose the impact of CO₂; in other words, they are **assumed to be positive** rather than **negative** feedbacks.

It is on the egregiousness of these assumptions rather than on the greenhouse effect itself, that most sceptics (including myself) have focused.

As we have just seen, the focus is on the one-dimensional view.

Its particular appeal is to physicists and astrophysicists, since it involves a minimum of detail, while letting them feel that they have mastered the subject.

My point here is to simply note that these individuals are often deeply familiar with radiative transfer, but not with fluid dynamics.

Many in this group will recall my disagreement with Dr Ed Measure on this very subject, and dates to a 2009 GRL article by Wang, Wang and Pielke, and a post in Roger Pielke's Blog.

Temperature in the Columns of air (Tcol) over North America increased, but the Precipitable Water did not.

There is NO positive feedback.

If there was positive feedback, Temperature would have run away long ago and we would not be here to discuss.

Ed Measure "was not convinced" because this study covered "only North America."

Next Slide shows the reference

Towards a robust test on North America warming trend and precipitable water content increase

http://pielkeclimatesci.files.wordpress.com/2009/10/r-337.pdf

Student's t tests showed that Tcol from 1979 to 2006 increased significantly; however, PWAV and PWAT did not. This suggests that atmospheric temperature and water vapor trends do not follow the conjecture of constant relative humidity over North America. We thus urge further evaluations of Tcol, PWAV, and PWAT trends for the globe.

Citation: Wang, J.-W., K. Wang, R. A. Pielke Sr., J. C. Lin, and

T. Matsui (2008), Towards a robust test on North America warming trend and precipitable water content increase, Geophys.

Res. Lett., 35, L18804, doi:10.1029/2008GL034564.

"...most projections refer to large-scale models of the atmosphere known as GCMs. The original expansion of this abbreviation was 'general circulation model.'

However, increasingly, they seem to be referred to as 'global climate models.'

These models do include much of the complexity of the real atmosphere, but they cannot provide the spatial resolution to handle processes such as vertical convection (that is, cumulonimbus towers), clouds in general and turbulence, which, as a result, require the use of questionable parameterizations.

Comment: There's a more fundamental problem; solutions to nonlinear (& atmospheric) partial differential equations don't exist; so, they guess, with parameterizations.>

They do, however, permit the inclusion of arbitrary feedbacks, which enable models to produce a wide variety of results.

Even these models don't predict catastrophic changes due to increasing CO_2 . Moreover, they don't adequately describe even the present climate (Boyle, 2006).

Lindzen refers to Vertical Convection.

Next Graphics show Vertical Convection.

The following slides show examples of how this is characterized in the operational world.

http://weather.rap.ucar.edu/upper/epz.gif Skew-T Log P diagram



The Skew-T allows easy calculation of dozens of thermodynamic variables

http://weather.rap.ucar.edu/upper/epz.gif Skew-T Log P diagram



is 5940 m high.



https://www.theweathernetwork.com/news/articles/ten-weather-terms-that-will-make-you-looksmart-at-parties/50620





Af BWh BWk BSh BSk Csa Csb Csc Cwa Cwb Cwc Cfa Cfb Cfc Dsa Dsb Dsc Dsd Dwa Dwb Dwc Dwd Dfa Dfb Dfc Dfd ET EF Aw

First letter	Second letter		Third letter	Data source: Terrestrial Air Temperature/Precipitation:
A: Tropical	f: Fully humid	T: Tundra	h: Hot arid	1900-2010 Gridded Monthly Time Series (V 3.01)
B: Dry	m: Monsoon	F: Frost	k: Cold arid	Resolution: 0.5 degree latitude/longitude
C: Mild temperate	s: Dry summer		a: Hot summer	Website: http://banschen.org/koppen
D: Snow	w: Dry winter		b: Warm summer	Tesoner manansenen orginoppen
E: Polar W: De	W: Desert		c: Cool summer	Ref: Chen, D. and H. W. Chen, 2013: Using the Köppen classification
	S: Steppe		d: Cold summer	to quantify climate variation and change: An example for 1901-2010.
	e. e.eppe			Environmental Development 5, 69-79, 10.1016/j.envdev.2013.03.007

World map showing climatic regimes following the Köppen classification

What produces the stability of the tropical temperature?



Incoming radiation, (insolation), and outgoing radiation vary with latitude. Tropics receive more solar radiation than they emit, creating an energy surplus. Polar regions emit more energy than they receive. This Imbalance causes "baroclinic Instability", <u>middle latitude storms, which act to export heat and momentum towards polar regions and reduce the baroclinic instability</u>.

http://1.bp.blogspot.com/tDTpvWrModo/U2XoP6s57XI/AAAAAAAAAA7o/r6lk0N5VHk8/s1600/Hadley+cells+

2 ux1 eiu edu.jpg



http://globalsailingweather.com/globalpatterns.php



Expanding on "middle latitude storms, which act to export heat and momentum towards polar regions and reduce the baroclinic instability," for Southern New Mexico and far west Texas.

http://pressbooks-dev.oer .hawaii.edu/atmo/chapter /chapter-13-extratropical -cyclones/



Expanding on "middle latitude storms, which act to export heat and momentum towards polar regions and reduce the baroclinic instability," for Southern New Mexico and far west Texas.



Left. These initial conditions can't remain stationary, because the sun adds more energy on the equatorward side. A slight disturbance at the surface, warm air aloft's heating causes expansion, divergence, surface pressure falls, surface Low-Pressure System forms.



http://pressbooks-dev.oerhawaii.edu/atmo/chapter/chapter-13-extratropical-cyclones/





Expanding on "middle latitude storms, which act to export heat and momentum towards polar regions and reduce the baroclinic instability," for Southern New Mexico and far west Texas.





Development of the surface Low Pressure system acts to move warm air (and momentum) poleward, and cold air moves equatorward. Above graphic on the left shows when the system has occluded, and the strong pole-to-equator temperature difference has been reduced.

However, the sun continues to dump more energy onto the planet equatorward, so the equator to pole temperature difference continues to increase, baroclinic instability grows, and soon another "Extratropical Cyclone" forms. Baroclinic instability grows fastest in northern Hemisphere spring, when heating of North America and Eurasia occurs, the middle atmosphere expands, sfc pressure falls, and air must flow into the continents to replace the falling pressures.

Expanding on "middle latitude storms, which act to export heat and momentum towards polar regions and reduce the baroclinic instability," for Southern New Mexico and far west Texas, below left.

https://www.weathernationtv.com/news/how-much-snow-for-colorado/



Red Arrows show heat and momentum being transported poleward in a Colorado Low pressure system.

As the storm moves east, it can tap Gulf of Mexico water vapor and lead to Severe Thunderstorms, hail, and Tornadoes



Blue Arrow shows this Great Lakes Low bringing cold Arctic air south.

In 1964, a similar system brought snow, blowing snow, -40F/40C temps to Glasgow AFB when I was a young forecaster.

https://pielkeclimatesci.wordpress .com/2012/02/14/on-selfregulation-of-the-climate-systeman-excellent-new-analysis-bywillis-eschenbach/ BY RPIELKE | FEBRUARY 14, 2012 · 7:00 AM

On Self-Regulation Of The Climate System – A New Analysis By Willis Eschenbach



Willis Eschenbach presented an excellent post at Watts Up With That titled

Argo and the Ocean Temperature Maximum

Argo and the Ocean Temperature Maximum



Willis Eschenbach

https://wattsupwiththat.com/2012/02/12/argo-and-the-ocean-

temperature-maximum/

12 Feb 2012

We are expanding on Lindzen's "What produces the stability of the tropical temperature?"



Argo Ocean Surface Temperatures, All Data, All Years

PRECURSOR All Argo ocean surface temperature data. There have been 696,872 Argo measurements to date of the ocean surface temperature.



Precursor:

https://wattsupwiththat.com/2012/02/09/jasonand-the-argo-notes/

All Argo ocean temperatures, sorted by latitude.

Note that there is an obvious upper limit to the ocean temperatures, the "flat-top" on the graph at just above 30°C. No matter how much incoming solar there is, the ocean doesn't get any warmer than that. This provides a "cap" on how hot the ocean can get. Above that temperature, any extra incoming energy is converted to latent and sensible heat, rather than warming the surface.

Argo Surface Temperatures



Histogram, Number of Argo Temperatures



A "histogram" shows how many data points fall in each of the 1°C intervals shown along the bottom axis. The maximum is in the interval 28°-29°C.





Annual temperature variations measured by all northern hemisphere Argo floats that exceeded 30°C. Temperature observations are colored by latitude Locations in the ocean which are recorded at some time as having reached or exceeded 30°C



Locations in the ocean which are recorded at some time as having reached or exceeded 30°C A Pacific-centered view of the data.



Annual temperature variations measured by all northern hemisphere Argo floats that exceeded 30°C. Dark lines have been added to highlight the average annual swings of the data by latitude band.



Annual temperature variations measured by all southern hemisphere Argo floats that exceeded 30°C.


Average annual temperature swings by latitude band. Two years (the average year , shown twice) are shown for clarity.



Where does CO₂ fit in the climate?

What should be clear is that it is absurd to assume that the complex three-dimensional climate is defined by the small difference of large numbers that is the average temperature anomaly, and that the controlling factor is the small contribution of CO_2 .

The Earth's climate has, indeed, undergone major variations, but these offer no evidence of a causal role for CO₂.

References for following Temperature and Carbon Dioxide data plots:

http://www.scotese.com/

http://ajsonline.org/content/301/2/182.abstract



[American Journal of Science, Vol. 301, February, 2001, P. 182–204]

GEOCARB III: A REVISED MODEL OF ATMOSPHERIC CO $_2$ OVER PHANEROZOIC TIME

ROBERT A. BERNER and ZAVARETH KOTHAVALA

Department of Geology and Geophysics, Yale University, New Haven, Connecticut 06520-8109

ABSTRACT. Revision of the GEOCARB model (Berner, 1991, 1994) for paleolevels of atmospheric CO_2 , has been made with emphasis on factors affecting CO_2 uptake by continental weathering. This includes: (1) new GCM (general circulation model)



X-Axis Time: Cambrian 600 MY ago Left
 Y-Axis Blue Average Global Temperature, Scotese Paleomap Project <u>Climate</u> Tab
 Y-Axis Black Atmospheric <CO2> Berner & Kothavala, Am J. Sci., 2001, p 182-204



If atmospheric <CO2> effect has such a great effect on Temperature and the feedbacks are so strong, why, at the end of the Ordovician, 450M years BP, did temperatures fall so precipitously, when <CO2> INCREASED from 4100 to 4500 PPM.? Similar effect in at end of Jurassic. Yellow Arrows.

https://www.forbes.com/sites/startswithabang/2019/01/02/the-simplest-explanation-of-global-warmingever/#529a021632b

To set the table, let's use this climate alarmist graphic from Forbes Magazine to show the temporal concentration of <CO2>, which shows that <CO2> never exceeded 300 Parts per Million for the past 450,000 years. Indications that it was warmer than today within the past 450,000 years with CO2 less than 300 parts per million CO2 are *prima facie* proof, to use a legal term, that CO2 could have NOT CAUSED that previous warmth.



http://en.wikipedia.org/wiki/File:Vostok-ice-core-petit.png



X-Axis Time Present Time, Left 450,000 years BP, Right
Y-Axis Blue Temperature difference "anomaly" from mean, last 10 K years
Y-Axis Green, Scale on Right atmospheric <CO2>

http://en.wikipedia.org/wiki/File:Vostok-ice-core-petit.png

Present <CO2> is ~421 PPM, which on the green CO2 scale on the right would be **Off Scale High**. If CO2 controlled temperature, **then this would be the warmest** of the five interglacials. It is the coldest.

It is obvious, CO2 does not control temperature



http://en.wikipedia.org/wiki/File:Vostok-ice-core-petit.png Antarctic Ice Cores



CO₂ is a particularly ridiculous choice for a 'pollutant.

Its primary role is as a fertilizer for plant life.

Currently, almost all plants are starved of CO₂





Carbon starvation in glacial trees recovered from the La Brea tar pits, southern California

Joy K. Ward*^{†‡}, John M. Harris[§], Thure E. Cerling^{†1}, Alex Wiedenhoeft[|], Michael J. Lott[†], Maria-Denise Dearing[†], Joan B. Coltrain**, and James R. Ehleringer[†]

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... Rancho La Brea tar pit fossil collection includes *Juniperus (C3)* wood specimens that 14C date between 7.7 and 55 thousand years(kyr) B.P., providing a constrained record of plant response for southern California during the last glacial period...

... Atmospheric CO2 concentration ([CO2]) ranged between 180 and 220 PPM during glacial periods, rose to 280 PPM before the industrial period, and is currently approaching 380 PPM in the modern atmosphere...

.. tree specimens... indicate.. that glacial trees were undergoing carbon starvation.

paragraphing, usage, emphasis, added

Where does this leave us?

This all leaves us with a quasi-religious movement predicated on an absurd 'scientific' narrative.

The policies invoked on behalf of this movement have led to the US hobbling its energy system (a process that has played a prominent role in causing current inflation), while lifting sanctions for Russia's Nordstream 2 pipeline, which was designed to bypass the existing pipeline through the Ukraine used to supply Germany.

It has caused much of the European Union to ban exploitation of shale gas and other sources of fossil fuel, thus leaving it with much higher energy costs, increased energy poverty, and dependence on Russia, thus markedly reducing its ability to oppose Mr Putin's aggressions.

Unless we wake up to the absurdity of the motivating narrative, this is likely only to be the beginning of the disasters that will follow from the current irrational demonization of CO_2 . Changing course will be far from a simple task.

As President Eisenhower noted in his farewell address in 1961:

The prospect of domination of the nation's scholars by Federal employment, project allocations, and the power of money is ever present and is gravely to be regarded.

Yet, in holding scientific research and discovery in respect, as we should, we must also be alert to the equal and opposite danger that public policy could itself become the captive of a scientific-technological elite. An Assessment of the Conventional Global Warming Narrative

As described in detail in Lindzen (2008, 2012), the US government committed itself to the current narrative by the early 1990s and greatly increased funding as a result.

Moreover, given the size of the energy sector, any attempt to rebuild it, however unnecessarily and ineffectively, presents immense opportunities for huge short-term profits – opportunities that are obviously tempting and strongly defended.

Atop all of this, has been the constant Goebellian repetition by the media of climate alarm.

And, this alarm is accompanied by so-called 'solutions' that deal with something, namely decarbonisation, that is, in fact, largely irrelevant to climate change, while imposing great and pointless pain.

It is essential – to western civilization itself – that the harm associated with this totally unwarranted alarm be ended, however difficult the task.

DIYnamics: Baroclinic eddies in a tank and in Earth's atmosphere



Baroclinic eddies in a tank and in Earth's atmosphere', provides a sense of how baroclinic instabilities emerge in a rotating tank driven by heat flux from a warm edge to cold center

https://youtu.be/5bnmaYOFerk?list=TLPQMzAwMTIwMjJrK1Y3llvMXA

Lindzen seems reluctant to Name Names. Let me provide some. John Kerry

He is really that ignorant! John Kerry wants to get Carbon Dioxide out (!) of the Atmosphere https://www.thegatewaypundit.com/2021/04/biden-climate-envoy-john-kerry-need-get-carbon-dioxide-

atmosphere-video/

Biden Climate Envoy John Kerry: "We Need to Get Carbon Dioxide Out of the Atmosphere" (VIDEO)

By Cristina Laila

Published April 22, 2021 at 12:50pm 1410 Comments



Carbon Dioxide reached critically low concentrations during the depths of the last Ice Age...the Wisconsin Ice Age, as it is called in North America.

Such critically low levels bring carbon starvation to the plants we consume for our carbohydrates.

Such are the findings in the following publication from the Proceedings of the National Academies of Science.

Juniper trees were starving because there was insufficient carbon dioxide in the atmosphere.

Such are the findings by Joy Ward and her co-authors.



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President Biden (and his climate Czar John Kerry) are acutely <u>unaware</u> that during the Last Glacial Maximum, as recently as 23,000 years ago, vegetation was carbon-dioxide starved.

If atmospheric carbon dioxide levels get too low, the plants will die.

All animal life, including ourselves, depend on plants for our carbohydrates to survive.

If the plants die, we will all die.

Biden Climate Envoy John Kerry: "We Need to Get Carbon Dioxide Out of the Atmosphere" (VIDEO)

The President and his Climate Czar appear to want to commit suicide, and commit us to the same fate.

No Thank You.

Lindzen seems reluctant to Name Names. Let me provide some. Eugene Robinson of the Washington Post.

Washington Post columnist calls on the EPA to regulate carbon emissions as a 'toxic substance'

The United States 'led the way into this mess. We need to lead the way out,' Post columnist Eugene Robinson argued

https://www.washingtonpost.com/opinions/2022/06/20/to-beat-climate-change-regulate-carbon-as-a-toxic-substance/

Washington Post columnist calls on the EPA to regulate carbon emissions as a 'toxic substance' | Fox News

The Washington Post published an op-ed Monday calling for the Environmental Protection Agency to "regulate carbon as a toxic substance" in order to combat climate change.

Post columnist Eugene Robinson, argued humans are losing the battle against climate change and specifically blamed the United States for exacerbating climate change. He called for the country to take steps to decarbonize regardless of what other countries like China do.

"Yet we have to find a way to snatch an acceptable victory from the closing jaws of defeat, because the consequences of runaway climate change are no longer theoretical," Robinson wrote. "It is already too late to avoid long-term consequences from climate change. The carbon we have pumped into the atmosphere will be there for centuries."

https://www.atsdr.cdc.gov/ ATSDR is the US Government organization tasked with providing information on toxic substances. Carbon Dioxide is NOT listed in ATSDR's data base of toxic substances because Carbon Dioxide is NOT A TOXIC SUBSTANCE.

ATSDR Agency for Toxic Substances and Disease Registry

Agency for Toxic Substances and Disease Registry



ATSDR's Stories of Collaboration ATSDR released its 2021 Annual Report. Learn how ATSDR works with citizens and agencies at every level to respond to environmental concerns. http://www.drroyspencer.com/wp-content/uploads/2000-years-of-global-temperatures-industrial-revolution-start.jpg

Part of the absurdity of the Narrative. It was warmer than at present in the Medieval Warm Period with only 280 PPM CO2.



by human activities

temperature variability in the extra-tropical Northern Hemisphere during the last two millennia

Data show Henry's Law: FIRST ocean temperatures change, THEN atmospheric<CO2>responds



- **X-Axis:** Time, Years, starting 1980
- Y-Axis: 12-month Change of global atmospheric <CO2> (NOAA; green)
- **Y-Axis:** Global sea surface temperature (HadSST2; blue)
- Y-Axis: Global surface air temperature (HadCRUT3; red
- Thin white horizontal is the Zero Change Line, from which 12-month differences are displayed.

Filtered values: (DIFF12, the difference between the average of the last 12 months and the average for the previous 12 months for each data series.

https://www.researchgate.net/publication/257343053_The_phase_relation_between_atmospheric_carbon_dioxide and global_temperature



"What historians will definitely wonder about in future centuries is how deeply flawed logic, obscured by shrewd and unrelenting propaganda, actually enabled a coalition of powerful special interests to convince nearly everyone in the world that CO2 from human industry was a dangerous, planet-destroying toxin. It will be remembered as the greatest mass delusion in the history of the world that CO2, the life of plants, was considered for a time to be a deadly poison."

