

Examining the 'Climate Emergency' Hypothesis

These are simply my gleanings after reading experts from both sides of the debate, to get a clearer idea of the deeper background. Oliver Perceval 2023.

A. THE 'CLIMATE EMERGENCY' HYPOTHESIS

The 'Climate-Emergency' hypothesis says that CO₂ (0.04% of air) is the main driver of weather extremes and climate, and that Man's CO₂ emissions are critically increasing this effect.

Therefore:

1. CO₂ must be the main controller of temperature and climate.
2. Our contribution is critical (man-made climate change).

The environmental movement has positioned Co₂ as the singular factor in GW (global warming) in response to the IPCC original remit to find and resolve the cause of AGW (anthropic global warming).

This seems to be a mistake and has radicalised the movement and alienated reasonable environmentalists who see a more nuanced picture. A 'Cult of One' has been formed (one science one truth), this is often dangerous and risks missing effective solutions and, by polarising issues, prevents constructive co-operation.

Atmospheric pollution as such is also a very small part of the unquestionably dirty footprint that our species is creating. If we myopically focus on a singular presumed cause, then we risk solving the wrong problem and ignoring other major issues arising from a one size fits all policy blueprint.

Check out:

IPCC Assessment Report 6 – general official overview, long!

https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter01.pdf

<https://www.ipcc.ch/report/ar6/syr/>

Joe Rogan and Andrew Dessler

<https://open.spotify.com/episode/5SvYrFIHAU2QbGamJebp3B>

Comparison of Recently Proposed Causes of Climate Change – peer reviewed summary of many non IPCC pointers.

<https://www.mdpi.com/2073-4433/14/8/1244>

[Global Warming Skepticism for Busy People](#). **Dr Roy Spencer** (Roy Spencer, PhD. - Climate Change Research Scientist, Author, Former NASA Scientist.)

To get a feeling for how complex the issue has been for so long there are 4hrs worth of reading in the comments to this blog ! Refreshingly from both sides and very respectful. [Doubling CO2 and basic physics](#)

The subjects discussed range from the 'AGW is 100% from man's 4% pa Co2' possibility (Co2GW), to 'man's CO2 doesn't help', to 'CO2 is mostly saturated below 200ppm', to 'other massive factors dwarf Co2', to 'AGW may well have negative not positive feedback' climate sensitivity is nowhere near as high as IPCC models presume. The overall consensus seems to be that AGW causes <1° rise with 4xCO2.

It was reported in the Daily Telegraph (July 2023):

*"The era of global warming has ended; the era of global boiling has arrived."
'Boiling? ... The power of free people to exercise their democratic will has suddenly shifted the parameters of the whole debate. So, it is time to have a grown-up discussion ...'*

<https://www.telegraph.co.uk/news/2023/07/29/climate-hysteria-is-greatest-threat-to-mankinds-survival/>

B. IS CO2 ACTUALLY THE HINGE FACTOR?

"Global warming" refers to the global-average temperature increase that has been observed over the last one hundred years or more.

Earth's atmosphere contains natural greenhouse gases (mostly water vapor, carbon dioxide, and methane) which act to keep the lower layers of the atmosphere warmer than they otherwise would be without those gases.

The net gain in IR (infrared) is kept within the troposphere and said to be causing an excess of heat, warming the oceans, and increasing GSAT (ground surface air temp).

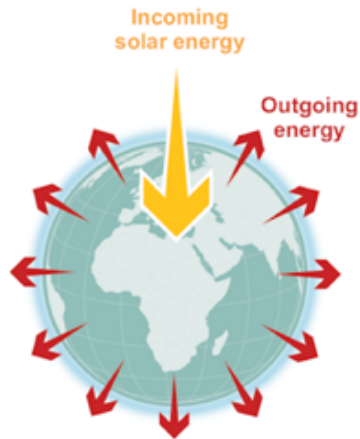
It is believed (based upon theoretical calculations) that our global emissions of carbon dioxide have enhanced the Earth's natural greenhouse effect by about 1% since 1850.

It is presumed that feedback loops must only be 'positive/runaway' and that catastrophe is certain

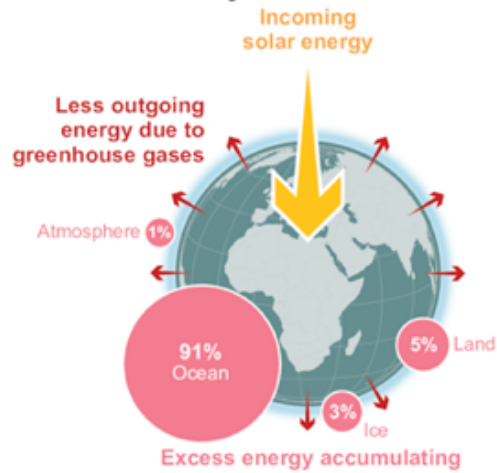
FAQ 7.1: The Earth's energy budget and climate change

Since at least 1970, there has been a persistent imbalance in the energy flows that has led to **excess energy being absorbed by different components of the climate system**.

Stable climate: in balance



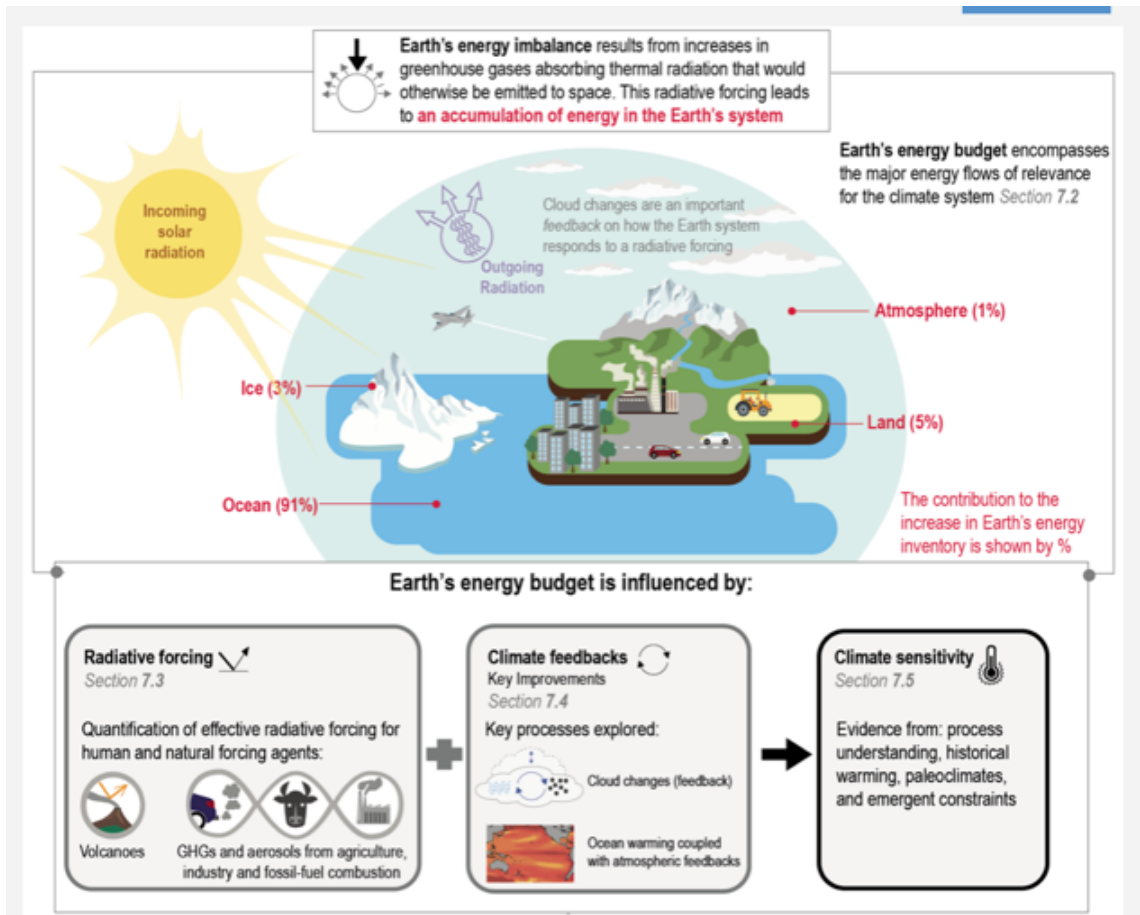
Today: imbalanced



[OPEN FIGURE](#)

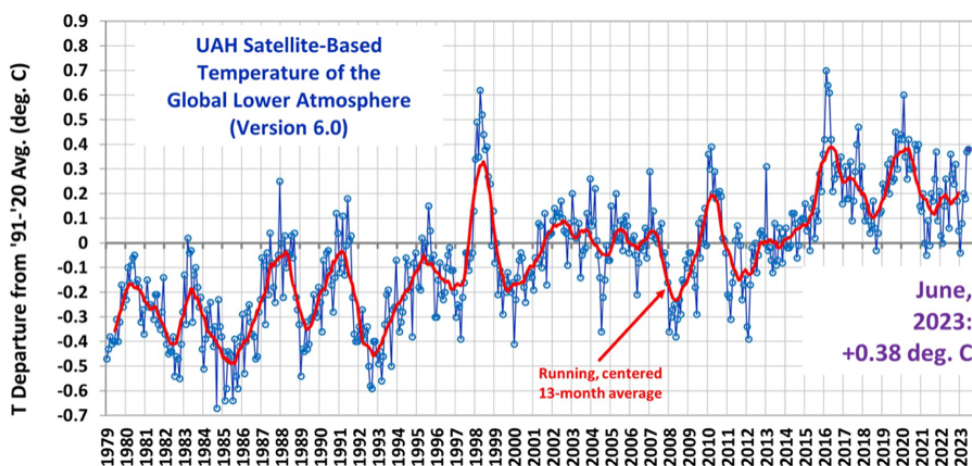
FAQ 7.1, Figure 1 | The Earth's energy budget compares the flows of incoming and outgoing energy that are relevant for the climate system. Since at least the 1970s, less energy is flowing out than is flowing in, which leads to excess energy being absorbed by the ocean, land, ice and atmosphere, with the ocean absorbing 91%.

Extract from IPCC AR6



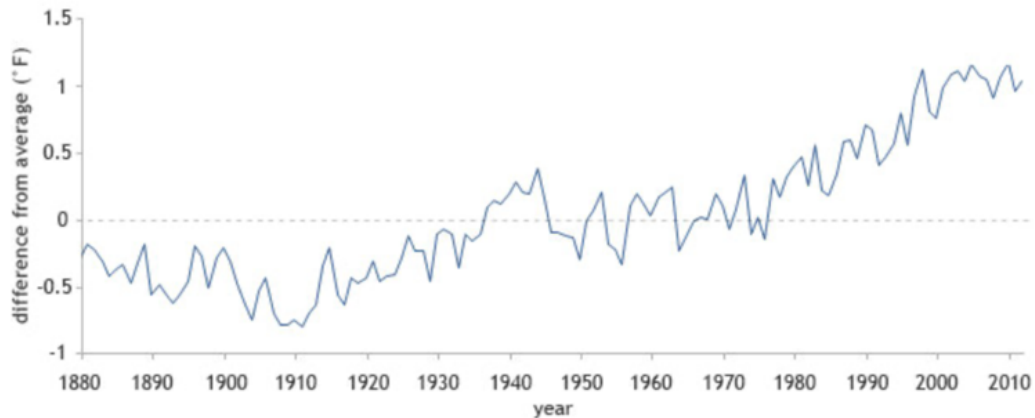
Extract from IPCC AR6

Latest Global Average Tropospheric Temperatures



[graph above] The satellite-era atmospheric temperature record compiled at the University of Alabama. Note the recent cooling, the three largest peaks, and all 'super El Ninos'.

Yearly surface temperature anomalies since 1880



Yearly surface temperatures since 1880 compared to the twentieth-century (1901-2000) average (dashed line at zero). Since 2000, temperatures have been warmer than average, but they did not increase significantly. [Data](#) courtesy of NOAA's National Climatic Data Center.

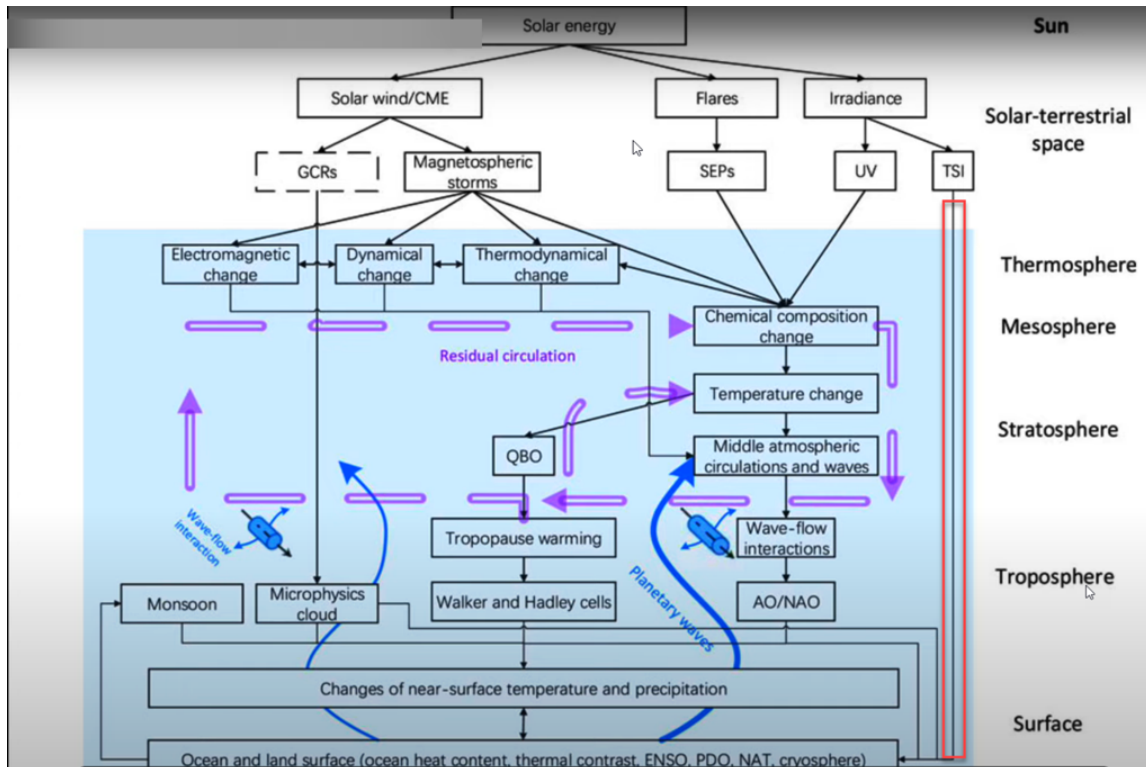
C. BUT IS THIS THE FULL PICTURE?

Atmospheric carbon dioxide is only suggested as a cause in one theory, which, despite its wide acceptance by Politicians, the media, and the Public, ignores the findings in other studies, including the ideas found in the Milankovitch Cycles.

The Milankovitch cycles are linked to precessional periods of c.12k and 24k years.

See Appendix 4: *“The core conclusion of the U.N. IPCC (about warming since 1950 being mostly human caused) can be entirely accurate, and yet the global warming threat can be virtually non-existent. The IPCC has become a master at instilling maximum alarm without supplying convincing reason for alarm. Alarm is instead based upon very speculative science which so far has little to no observational support.”*

Outlined in the red box below (RHS) is the only factor that the IPCC models take account of from all the solar forcing factors.



D. INCREASE IN CO2 LEVELS

It is generally accepted that atmospheric CO2 levels have increased by **45%** from 280ppm in **1960** to 420ppm in **2020** (2.3ppm/year).

But isn't this deceptive as a figure that is used to cause alarm, since **linear content change** is NOT the same as **power to warm**.

1. Spectral measurements of CO2 radiation increase *at the surface* from 2001~2010 = 0.2 watts/decade.
2. In that decade, CO2 concentration increased by 23ppmv (and 138ppmv since accurate measurements began in 1960)
3. 60 years increase = 1.2 watts
- 4.

The natural surface flux over the planet is 240 watts. An increase of 1.2 watts over 60 years does not a catastrophe make ?

So, although CO2 ppm has increased by **45%** in 60 years, the surface flux has only increased by **0.05%**

"There seems to be no connection between carbon dioxide and the temperature of the Earth." [14,19,28,29,43,44,45,46].

Or looked at another way:

CO2 accounts for **0.04%** of atmospheric gases. Surface average content is currently approx 440ppm.

Our average annual contribution is **2.3ppm**. This is **0.00023%** of all atmospheric gases.

GWP (global warming potential) is cited as the 'power to warm' of other gases compared to CO2 as a baseline, but all these arguments are very relative to the amount of influence CO2 has on the whole system. The presumption and default position being that CO2 is the only and major forcing mechanism.

CO2 spectral greenhouse absorption band is 666 waves/cm (in bending mode), 15 μm, which is a very narrow band in the IR spectrum of outgoing thermal radiation. (2349 band n/a - too high)

Incident UV is reflected in IR bands of 4μm to 30μm. **Only the 15μm band is absorbed.**

Of the CO2 molecules in that band that absorb infrared energy from the Earth's surface **5%** participate in the photon re-radiation process about 3-4 km above the surface. Of this 5% of random radiation max **50%** are directed below horizontal – back to earth.

The other 95% of heat is transferred from CO2 (010) kinetically via collisions to other atmospheric gases.

<https://geoexpro.com/recent-advances-in-climate-change-research-part-ix-how-carbon-dioxide-emits-ir-photons/#:~:text=The%20photon%20transfers%20its%20energy,state%20by%20giving%20up%20energy>

This DOES create a heat blanket. These gases lose the energy acquired through collisions by slowing down again – there is no heat radiated back to ground surfaces from the upper troposphere from the loss of this kinetic energy, it is radiated back into space, commonly called Outgoing Long Wave Radiation and the **Lapse Rate**.

Does the 2.3ppm per year addition to the heat blanket critically stress the lapse rate ?

Does our annual contribution actually make a potentially catastrophic difference that is more significant than the 95% water vapour and clouds (feedback), and other forcing mechanisms?

We don't really know for sure how CO2 behaves because our global observations from spaceborne satellite instruments are not accurate enough to measure those flows of radiant energy from IR reflective gases.

Water vapour accounts for 95% of GHGs and operates in the UV and IR spectrum for absorbing/reflecting radiative heat (as well as reflecting inbound radiation)

TSI (total solar irradiation) consists of UVA/B/C in one part of the spectrum and TSI is blocked by clouds. The IPCC only account for UV radiation, not X rays or other cosmic

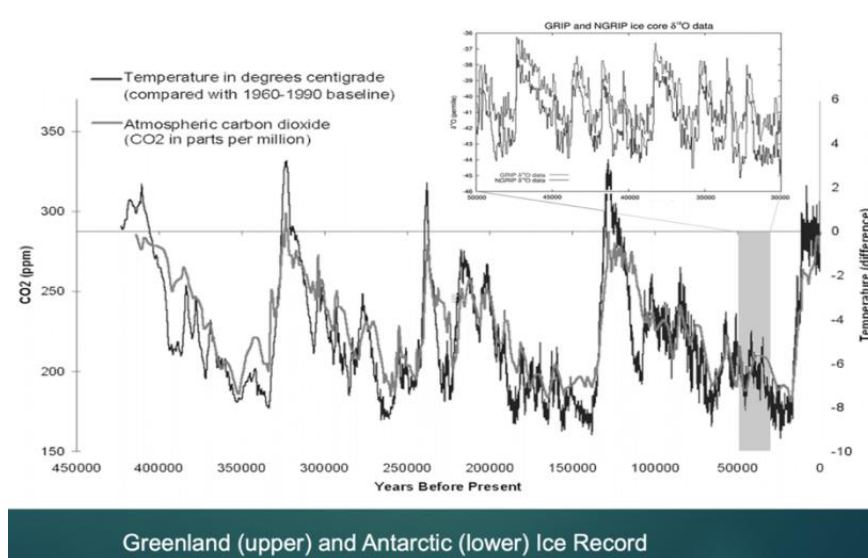
forcings. Cloud cover varies massively compared to CO2 variance. The function of CO2 is, by definition, secondary to incoming UV.

The Relationship between Atmospheric Carbon Dioxide Concentration and Global Temperature for the Last 425 Million Years. - This study demonstrates that changes in atmospheric CO₂ concentration **did not** cause temperature change in the ancient climate. <https://www.mdpi.com/2225-1154/5/4/76>

E. WARMING

Global warming of Earth's surface effectively stopped twenty years ago. Two big El Nino (ENSO) events, where warmth is released from the ocean, bumped up the surface figures for 2016 and 2020 – by as much as 0.6° C of the 'record' 1.2° C – otherwise, the 21st century saw no increasing surface trend.

It is argued that internally, the oceans continued to warm as excess heat was drawn down, hence global warming did not stop – but this is exactly what natural cycles do – they bury heat at depth and release it later.



The globe has cooled since 2016 peak – see the graph earlier on, derived from atmospheric measurements by satellite. (GSAT stations seem to be manipulated by positioning near heat islands and closer to ground level than the normal 2m)

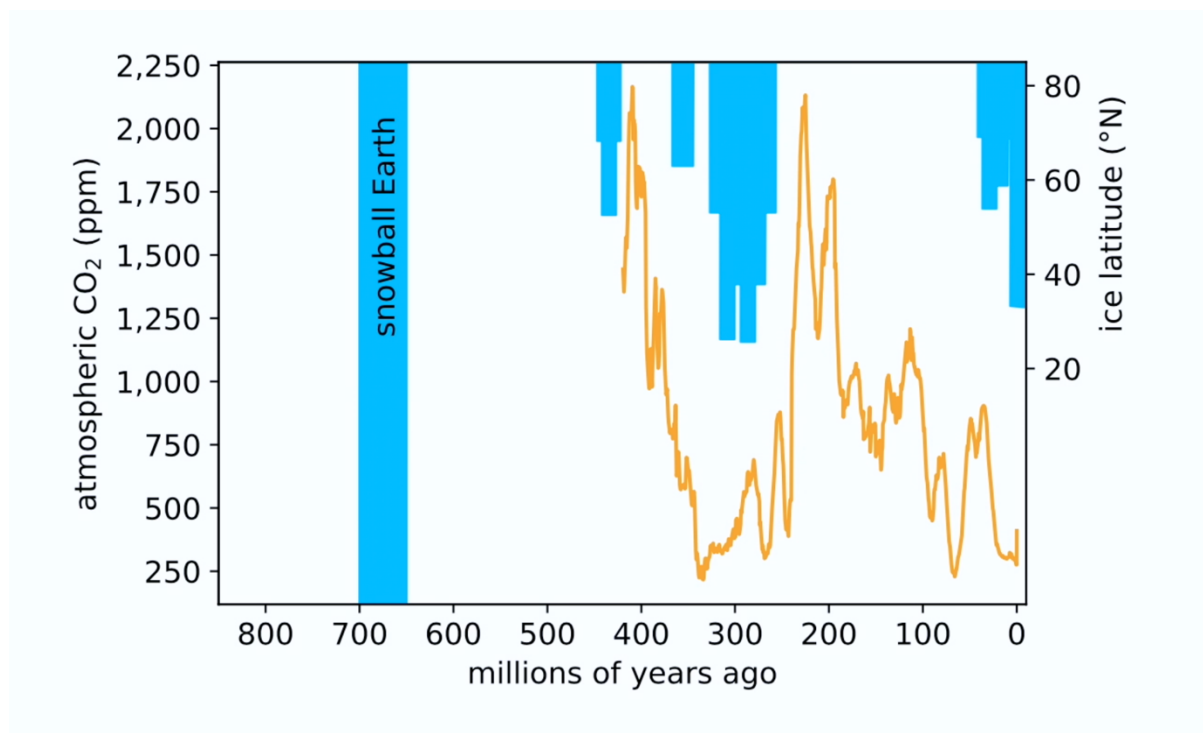
Prior to 1950, even the Intergovernmental Panel on Climate Change's models show insignificant contributions to warming from carbon dioxide – the main increase of which was post-1950.

If one compares a major warming from 1920-1945 with 1975-2000, there is no difference in the rate and magnitude of the warming during both periods (and there was no warming from 1945-1975 – in fact a slight cooling to 1962, despite the rise in carbon dioxide).

If we look at proxies for temperature in the heat content of the oceans or the retreat of glaciers, then global warming started in 1850, and the current magnitude lies between 0.8° and 1° C, up since pre-industrial times (the 2016 ENSO event caused a brief excursion to 1.2° C, and this figure is often quoted despite its mostly natural causation).

High solar activity = warmer periods (Holocene, roman, medieval). Low solar activity = cooler (Maunder, Dalton)

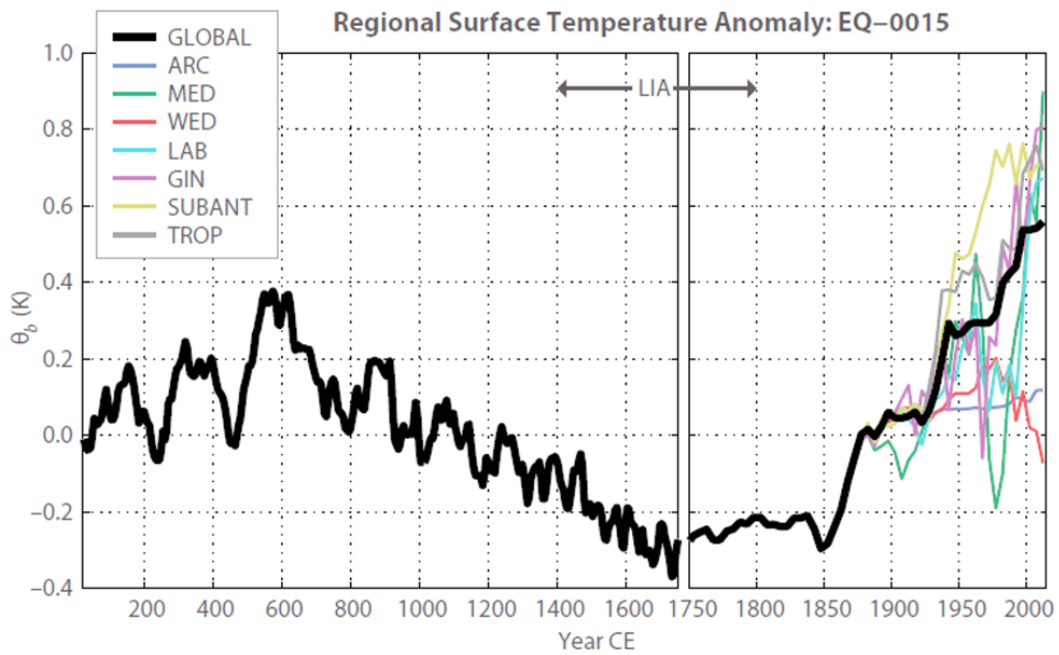
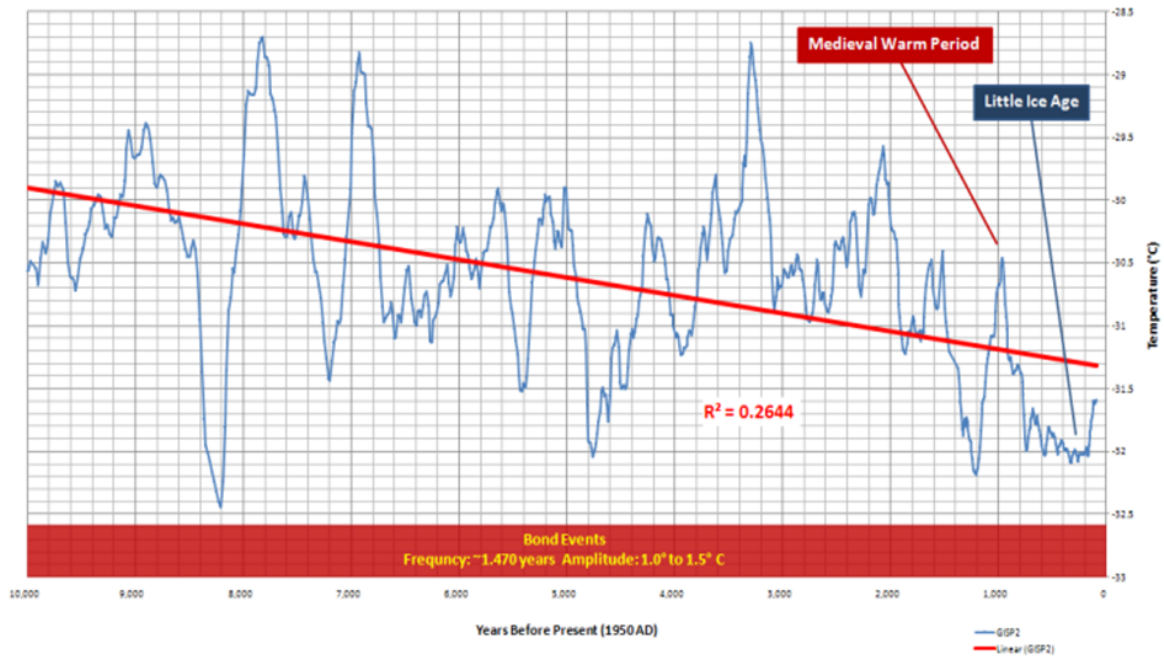
It is known that it was warmer here for the Romans, colder in the dark ages, much warmer in the middle ages, then we entered the Maunder minimum, and since about 1850 have been emerging from that cold period, and so the recent heating trend is to be expected ... and none of that was in the industrial age. We are currently in an interglacial period. We are ending solar cycle 25 with weakening activity currently heading for a cooling and also for overdue dramatic CME cycles.



From Dr Dessler (AGW proponent)

Beat cycles – not accounted for in IPCC assessments?

GISP2 Ice Core Temperature Reconstruction for Central Greenland
Data from: Alley, 2000



1850-1900-1950 rates of change cycles were pre industrial CO2 changes ...

The 'CO2 fingerprint' is not that conclusive.

F. MODELLING

The modelling is tuned with the assumption *that the “climate system is in a natural state of energy balance, and that there is no long-term climate change unless humans cause it.”*

The computerized climate models support human causation of climate change because that’s what they assume from the outset. They are an example of circular reasoning.

The climate system is in fact an example of a **“non-linear dynamical system”**

Models are only as good as the data put in. If climate is a non-linear open system, how could we possibly have all the right factors and values to input to the models ?

One of the most fundamental requirements of any physics-based model of climate change is that it must conserve mass and energy. Some interesting discussion in the comment thread here too. We see how complex the system is.

<https://www.drroyspencer.com/2023/08/sitys-climate-models-do-not- conserve-mass-or-energy/>

“Climatological models...pretend on a long-term description of the atmosphere...ignoring physical laws in climatology.” – [Smirnov, 2022](#)

“The Kirchoff law is neglected in climatological models. This leads to a large mistake in prediction of the global temperature change.”

Slow changes in the rate of **vertical overturning** of the world’s oceans can cause global warming (or global cooling) with no “external forcing”.

Also the cycles of **Atlantic Meridional Overturning Circulation** (AMOC) have a profound impact on climate, on a long time lag.

Atlantic meridional overturning circulation. AMOC. The Atlantic is at risk of circulation collapse – it would mean even greater climate chaos across Europe.

<https://theconversation.com/the-atlantic-is-at-risk-of-circulation-collapse-it-would-mean-even-greater-climate-chaos-across-europe-210570>

The models cannot produce global energy balance from “first physical principles” because none of the processes controlling that balance are known to sufficient accuracy. They are only as good as the ‘data in’.

Models assume all energy transfers are **radiative**. Which is not the case.

The result can only be that CO2 causes recent warming, but that is **circular reasoning**.

The **“back radiation”** explanation of Global warming is by a “CO2 blanket” – that is, the increased CO2 in the atmosphere forms a blanket preventing heat returning into space, thus keeping the Earth warm.

However, CO₂ is **NOT** a 'diode', emitting heat one way only, and it cannot radiate more heat than it absorbs.

To warm the atmosphere (1%) and oceans (91%) to such an extent the CO₂ would have to emit more heat than it absorbs – which isn't possible ... there must be other energy inputs. CO₂ radiates/transfers exactly what it absorbs. It doesn't get hotter and hotter.

Ground radiates IR up to the CO₂ in the troposphere, and CO₂ reaches same temp as the ground. At night it loses heat and cools down again anyway, whilst there is no incoming solar UV.

Objects in a "radiation enclosure" will actually balance out to the same temperature (reach equilibrium). A US double glazing co. thought CO₂ was a one way heat diode – but went bust!

The arrows in the IPCC diagrams disobey Henry's law (ocean interface) and 1st and 2nd laws of thermodynamics, and non-equilibrium thermodynamics.

The only way CO₂ might warm the planet is if it changes Earth's emissivity, ϵ , and we do not yet have a theory that quantitatively explains that. CO₂ does not create energy, it only absorbs and passes it by either re-emission or conductive transfer in collisions with other molecules.

CO₂ can only absorb/radiate as much heat as is freely available in the system. As the amount of freely available heat (not tied up in other processes) becomes increasingly absorbed by increasing amounts of CO₂, there comes a point where there is nothing more to absorb.

<https://www.drroyspencer.com/2010/09/on-the-relative-contribution-of-carbon-dioxide-to-the-earth's-greenhouse-effect/>

(Dr Spencer – an AGW denier with real credentials. See Appendix 4 as well.)

CO₂ is only responsible for about 3% of the entire greenhouse effect that exists in our atmosphere to make the planet a life zone as we know it. So increasing CO₂ from 300ppm to 400ppm could only at the absolute most represent a 25% of 3% = 0.75% increase in the entire greenhouse effect on the planet.

Clouds at a density of 2.5g/m³ absorb **100%** of IR, to 12km depth. CO₂ doesn't get a look in.

The whole of global warming has added about 2W to the natural surface flux of 240 watts – that is about 1% and not as scary as a 50% figure, and so small it can hardly be measured above natural variability.

<https://www.mdpi.com/2225-1154/5/4/76>

Climate scientists have determined, and both sides agree, that **the warming effect of each molecule of CO₂ decreases** significantly (logarithmically) as its concentration increases. This

is one reason why there was no runaway greenhouse warming when the concentration of CO₂ was approaching 20 times that of today. **Diminishing returns apply.**

<https://arxiv.org/abs/2006.03098> (not peer reviewed)

<https://www.drroyspencer.com/2010/09/why-33-deg-c-for-the-earths-greenhouse-effect-is-misleading/>

"Impacts from agricultural activities also seem to be changing. During summer in the U.S. upper Midwest, scientists are seeing an intense absorption of carbon dioxide associated with agricultural activities. The same thing is being observed in Eastern and Southern Asia. The strong absorption of carbon dioxide across China is erasing all but a thin strip of fossil fuel emissions along the coast, with Central China now functioning as **a net absorber of carbon dioxide** during the growing season. Thanks to the development of big, sophisticated computer models combined with wind and other measurements, we're able to quantify these changes for the first time."

<https://climate.nasa.gov/news/2915/the-atmosphere-getting-a-handle-on-carbon-dioxide/>

According to official sources (NOAA, DWD), the net long-term cooling effect of clouds is about -20 W/m². It is thus much stronger than the so-called back radiation effect exerted by increased levels of "greenhouse gases," which is assumed to be just +3.222 W/m². Since common sense tells us that a warming climate should result in more evaporation of water, this should in turn ultimately form more clouds – resulting in a cooling effect on earth's climate.

See Berkeley Lab Experiment

<https://pricipia-scientific.com/industry-experts-co2-worse-useless-trapping-heatdelaying-cooling-2/>

The fall in temperature as we go higher in the atmosphere is **the lapse rate** or rate of heat (radiation) escaping into space and has nothing to do with CO₂ or any other "greenhouse" gas. More Co₂ should raise the height of the radiating zone and should make the upper atmosphere warmer, but it doesn't. It cools. (Co₂ gains and loses heat more easily than N₂ and O₂ so the air adjusts quicker to diurnal variations)

Around one billion years ago atmospheric CO₂ was around 35% yet the planet was plunged into 'snowball earth' where ice extended to the equator.

G. CLIMATE SENSITIVITY

Understanding Climate Sensitivity depends on a deep knowledge of feedbacks, which we do not have.

IPCC AR6 admits that the buffering effect of clouds is understudied. *"we concede that the effects of clouds do indeed represent the greatest uncertainty in our climate predictions"*

Climate sensitivity has been surprisingly difficult to determine. How atmospheric processes like clouds and precipitation systems respond to warming is critical, as they are either amplifying the warming, or reducing it.

Satellite evidence suggests climate sensitivity is low (ie system buffers changes very effectively).

The effect of adding a minor % of CO₂ into the big picture can be less than the margin of error in measuring the effect of water vapour in the models: i.e 'man made' global warming might not even be measurable, lost in the noise of natural climate variability.

In the tropics the greenhouse mechanism is already appreciated as secondary to other factors.

Warmer air holds more moisture, which radiates more IR – which buffers heat gain.

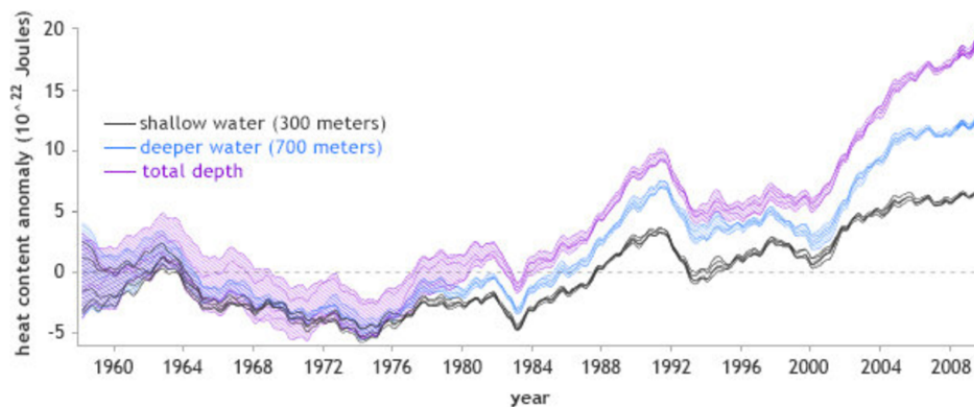
H. OCEANS

The **Pacific Decadal Oscillation** shows that most climate change might well be the result of the climate system itself, because small, chaotic fluctuations in atmospheric and oceanic circulation systems can cause small changes in global average cloudiness, this is all that is necessary to cause climate change.

When analyzing temperature patterns at different depths of the ocean, scientists observed that **deep ocean temperatures**—measured more than a half-mile down from the surface—began to rise significantly around 2000, while shallower waters warmed more slowly. This divergence took place at the same time that a natural climate cycle called the Pacific Decadal Oscillation, or PDO, was shifting to a negative phase.

https://www.esa.int/Applications/Observing_the_Earth/Our_seas_are_capturing_more_carbon_than_expected

Ocean heat content, 1958-2009



Yearly global ocean heat content compared to the 1958-65 average (dashed line at zero) for the past four decades for different layers of the ocean: from the surface to depths of 300 meters (grey) and 700 meters (blue), and total depth down to 2,000 meters (purple). Surface waters warmed more slowly (line is nearly flat since the mid-2000s) than deeper waters (steep increase). Since the core of the Argo fleet can only dive down to 2,000 meters, the amount of heat going into the deep ocean is unknown. Image adapted from Figure 1 of [Balmaseda et al., 2013](#) (pdf).

Sea temperatures govern CO₂ as the oceans hold 50 times more CO₂ than the atmosphere. If the sea warms, CO₂ is released and if it cools it absorbs CO₂ from the air. CO₂ levels lag these temp changes.

CO₂ emitted from the sea surface in warm periods gets swallowed up into the cold deep ocean by currents off e.g. Greenland and emerges 500-800 years later in the air over the Pacific etc. after a long deep sea trek. So, the amount of CO₂ in the atmosphere, over the long run, is an effect, and not a cause, of temperatures and lags behind the climate by about 500-800 years.

IPCC AR6 ch.7, and NASA say that ocean temps are driven by 0.00064% extra Co2 warming.

This IPCC diagram shows the Ocean as 91% of the heat sink, it points the finger at GHGs within the 1% of atmospheric accumulation...

Other Scientists however are increasingly tuning out the claims that the Earth's temperatures are predominantly shaped by anthropogenic CO₂ emissions, or that future climate is destined to be alarmingly warm primarily due to the rise in trace atmospheric gases.

For example, in 2016 alone, there were at least 132 peer-reviewed scientific papers documenting a significant solar influence on climate. Among them there were 18 papers that directly connected centennial-scale periods of low solar activity (the Little Ice Age) with cooler climates, and periods of high solar activity with the Medieval Warm Period and the Modern Warm Period [20th Century]. Another 10 papers warned of an impending solar minimum and concomitant cooling period in the coming decades.

And this trend of scientists linking climate changes to solar forcing mechanisms — and bypassing an anthropogenic explanation — continues to enrage the mainstream ...

I. WHAT ELSE COULD DRIVE CLIMATE VARIABILITY APART FROM CO2?

Heat extremes are from wild jet streams = uneven world temps, not more uniform global warming.

Weather disturbance is driven by temperature difference between poles and tropics.

All extremes now are the wrong extremes for the CO2 story because the current wild Jet Stream negates the supposed flatter Jet Stream in the CO2 story. As the sun enters a weaker cycle the extremes are increased.

Weaker sun: weaker jet streams, extreme temps and rain. Weaker polar vortex – cold events.

Stronger Sun: tight jet streams and vortices = warmer weather, less extreme.

J. SOLAR AND COSMIC FORCINGS ARE NOT ACCOUNTED FOR IN THE IPCC REPORTS

The effects of solar forcing on the weather and climate are substantial but not taken account of in the IPCC assessments. *Solar storms and hurricanes, 2023 6mins.*

<https://youtu.be/up-SojmxW2Y>

Other forcing factors apart from the 0.1% varying TSI are: **EM fields, EM waves** (UV, X ray), **cosmic rays** (EM particles, high energy nuclei, protons/electrons), **solar wind, solar flares. Galactic electric sheet.**

EM waves cause vertical column modulation via EM coupling which gives an instant and strong effect.

General effects on the **GEC** (global electrical circuit) occur in the NAO, QBO, PDO, NAO. N&S annular mode.

The Earth is constantly being bombarded with 'cosmic rays'. When the particles coming down meet water vapour rising up from the sea, they form water droplets and make clouds.

But when the Sun is more active and the Birkeland currents are stronger, few particles get through and fewer particles are formed.

When the cosmic rays go up, more clouds are produced and the temperature goes down. When the cosmic rays go down, the temperature goes up. Clouds and the Earth's climate are very closely linked.

The climate is primarily controlled by the clouds. The clouds are controlled by cosmic rays. And the cosmic rays are controlled by the Sun. More solar activity means stronger Birkeland currents which deflect more cosmic rays from earth. Less activity = more cosmic rays = more clouds = more rain etc.

IPCC state that 0.1% variance in TSI (around 1360-1366 W/m²) has no effect.

The IPCC TSI modelling only accounts for UV, and 11 year sunspot cycles, which are pretty steady.

The UV part of it is a very small percentage of TSI (total solar irradiance).

IPCC also currently ignores 60 yr lunar modulation cycle, 2000 year cycles, 12,000 year cycles etc.

Thermospheric parameters' long-term variations over the period including the 24/25 solar cycle minimum. Whether the CO₂ increase effects are seen?

<https://www.sciencedirect.com/science/article/pii/S1364682621001905>

The main conclusion: *despite continuous CO₂ increase in the Earth's atmosphere long-term variations of thermospheric parameters are controlled by solar and geomagnetic activity.*

CO₂ increase does NOT always precede GSAT increase. **Vostok ice cores** (from Al Gore etc) show warming precedes CO₂ increase by 500-800yrs. Also, trends pre 1850 (the only graphs IPCC use) don't suggest that this era is much different.

The greening of the planet due to increasing CO₂ levels, with greening having both a cooling and carbon sink effect:

<https://thebarentsobserver.com/en/node/6423#:~:text=—A%20new%20study%20reports%20continued,in%20the%20air%20with%20water>

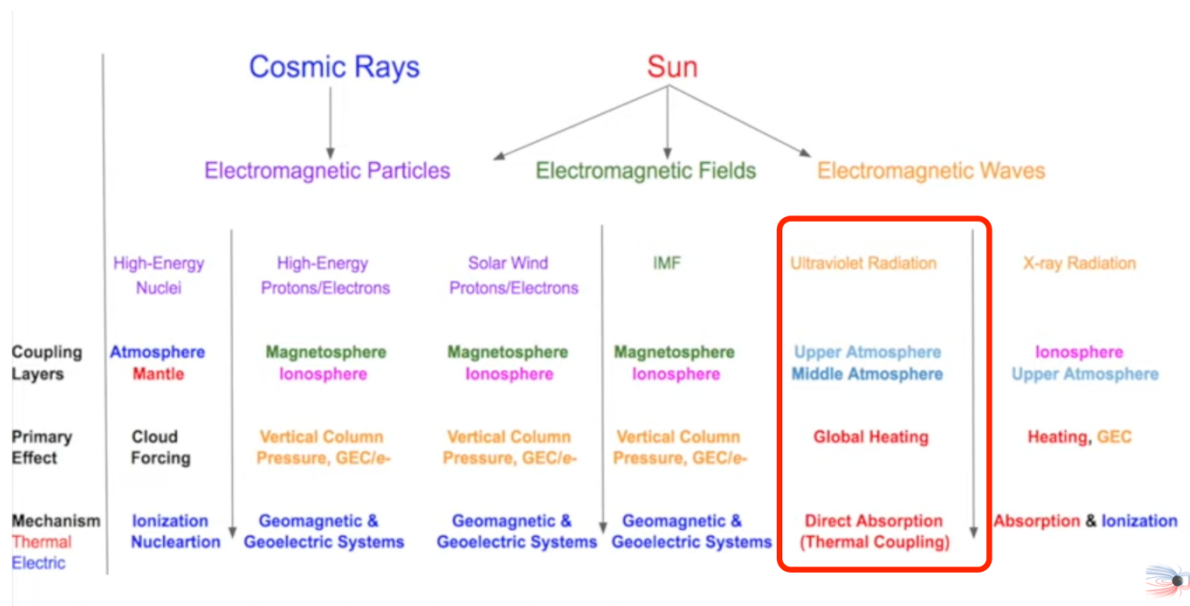
The sun's current activity suggests that another new Little-Ice Age is upon us. The recent low activity solar cycle 24 and expected low cycle 25 mean we are at the early part of another Little Ice Age....

Modern Grand Solar Minimum will lead to terrestrial cooling

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7575229/>

A **Solar Micronova** is not something very many people understand it's on the verge of recurring, and it truly dwarfs climate science arguments because what happens when it occurs is beyond significant for life on Earth.

<https://www.youtube.com/watch?v=cEMXp1HlzUs&feature=youtu.be>



K. ORBITAL FORCING

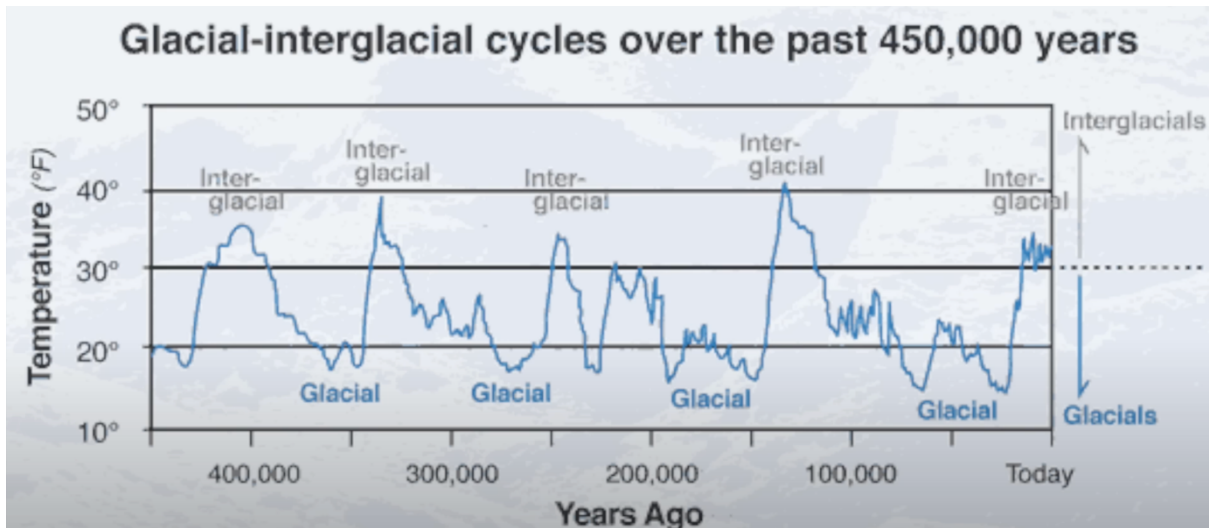
Peter Hadfield (former geologist and science journalist) “Does CO2 lead or lag global temperature?” concludes, after reviewing the scientific literature, that yes indeed CO2 lags behind temperature after the recent glaciations. He says the most likely cause of these temp rises was changes in the ‘**Milankovitch cycles**’ (changes in the Earth’s orbit around the Sun over 413,000 years, in the Earth’s tilt over 41,000 years, and the orientation of the Earth’s axis over 24,000 years) causing more ‘solar radiation. This is known as ‘insolation forcing’ or ‘orbital forcing’.

<https://www.youtube.com/watch?v=zQ3PzYU1N7A>

The 23 ka Milankovitch cycle has begun to reduce the winter insolation received at the surface of the atmosphere in the mid-latitudes of the Northern Hemisphere starting in 2020. This results in extreme weather as the winter insolation reaching the surface of the atmosphere in the higher latitudes of the Northern Hemisphere decreases while the summer air temperatures increase. It heralds the start of the next glaciation. <https://www.mdpi.com/2073-4433/14/8/1244>

The Next Ice Age | Glaciation is Coming. AMOC collapses, Polar Ice melting, Beaufort Gyre released...

<https://youtu.be/hJ8OmLhFnK8>



L. GEO ENGINEERING – WEATHER MODIFICATION AND WEATHER WARFARE

The majority of scientists concerned about solar warming are calling for climate modification. Dimming of the sun with chemtrails (aluminium, strontium, boron, etc nanoparticles and chaff). This seems to be the height of hubris and ignorance unless it is really about climate warfare.

<https://www.corbetteport.com/geoengineering-the-real-climate-change-threat/>

Jim Lee of ClimateViewer Takes on the History of Geoengineering

https://reinettesenumsfoghornexpress.substack.com/p/jim-lee-of-climateviewer-takes-on?utm_source=substack&utm_medium=email#media-2e7e0695-d517-4b2b-81f2-1f5f552a57c6

The Dimming, Full Length Climate Engineering Documentary

<https://www.youtube.com/watch?v=rf78rEAJvhY>

CONCLUSION: WE DO POLLUTE, WE HAVE INCREASED CO2 ...

CO2: is not bad for us. Safe limits in spacecraft and submarines are 5000-7000 ppm.

CO2: is good for plants, and plants absorb CO2/keep a balanced cycle. They die off if levels are less than 150ppm.

CO2: has been a lot higher in the past, with no associated warming.

IF we don't recognise and consider **ALL** the influences on earths' climate system, then we will respond inadequately, and if we also **MISS** the fact that perhaps we are entering a **macro cycle of cooling** then we will also be preparing for the wrong eventualities ...

“The role of the IPCC is to assess on a comprehensive, objective, open and transparent basis the scientific, technical and socio economic information relevant to understanding the scientific basis of human induced climate change” Maurice Strong, founder.

A priori the IPCC can and must only consider AGW (man made global warming), thus preventing objectivity from the outset. If the problem is pre-determined then there can be no real progress in understanding an immensely complex non linear open system such as global climate.

There is not truly a ‘consensus’ that CO2 is the bete noire. (1000s of researchers have a more nuanced view, and many cited in the IPCC AR6 ‘2,500’ are not ‘experts’ or even in agreement!)

The IPCC WG2 and WG3 build their assessments on WG1. If the founding presumptions of WG1 are wrong then the other working groups compound the error.

Nearly all governments worldwide have made significant investments in carbon emission reductions and renewable energy supplies. Vast sums of money are moving around in carbon credits, offsets, wind turbines, hydro-schemes, biofuel plantations, solar farms and the carbon story has rejuvenated the nuclear industry.

The IPCC may never recover from the **Climategate** scandal of 2009, and ongoing reported manipulations of data. The CIA **Adam and Eve** paper declassified in 2016 highlights the glaring omission of critical factors from the IPCC presumptions. If anything other than CO2 is shown to cause terrestrial warming then it is consistently ignored.

There is not actually any certainty around mechanisms and relationships governing global climate. The ‘catastrophe’ scenario is still presumed. **Making predictions and forming policy upon a predetermined assumption of cause is utterly unscientific.**

Perhaps all the knowledge taken *in the round* can take the ‘stress’ out of the story.

Even if the weather and climate are driven by factors way bigger than mankind can influence, our activities do cause habitat loss and poison the ecosystem.

We must recognise that the quantity of ‘Renewables’ needed to match the **energy density** needed*, and offered by ‘fossil’ fuels, will also have a dramatic impact on our ecosystems.

We must clean up, we must innovate, we must achieve breakthrough truly ‘green and clean’ tech. Perhaps unfettered capitalism and the insanity of eternal growth are the real issues. Diverse and lateral changes are needed.

* Very hard to replace aviation fuel with renewables – consider life cycle of renewables, not viable

<https://royalsociety.org/news/2023/02/net-zero-aviation-fuels-report/>

OTHER SOURCES OF INTEREST:

Ian Plimer - Climate Change explained to UK gov 2022 (15mins)

<https://www.youtube.com/watch?v=uVYgGDUUZ2Y>

The abstract here sums it up pretty well as far as I can tell having read around the topic

(See at end of my doc **APPENDIX 1 SUMMARY**)

https://www.amazon.com/Global-Warming-Skepticism-Busy-People-ebook/dp/B07H57WVYJ/ref=sr_1_1?s=books&ie=UTF8&qid=1538663092&sr=1-1&keywords=global+warming+skepticism+for+busy+people

Dr. Patrick Moore - Carbon and Climate Catastrophe

https://www.youtube.com/watch?v=IX1z_6pvM-Q

Big picture: THE Earth Disaster Documentary

<https://www.youtube.com/watch?v=iHWollxHI3Q&list=PLHSoxioQtwZf1-8QeggXIVdZ-abyJXaO1>

<https://dailysceptic.org/2023/08/22/is-it-really-human-beings-who-are-triggering-earthquakes-and-causing-volcanoes-to-explode/#comments>

Here's a study that identified an April-June major warming period from 1947 to 2015 in an area of China, this correlates reasonably well with the uptick in solar flares in that same general period of time, and the scientists in this study attribute the warming (which included two other major warming cycles 1876–1880, 1900–1902 before manmade emissions were seriously underway) to "the interaction of solar activity and large-scale atmospheric-oceanic variability".

<https://rmets.onlinelibrary.wiley.com/doi/abs/10.1002/joc.8196>

<https://nypost.com/2023/08/09/climate-scientist-admits-the-overwhelming-consensus-is-manufactured/>

<https://dailysceptic.org/2023/08/20/any-co2-involvement-in-recent-unusual-climate-patterns-is-lost-in-the-noise-of-natural-variability/#comments>

<https://dailysceptic.org/2023/04/30/the-top-scientist-who-warned-of-a-coming-ice-age-then-switched-to-catastrophic-global-warming/>

<https://www.telegraph.co.uk/news/2023/09/06/global-warming-climate-change-scientist-unrealistic-nature/>

APPENDIX 1

WHAT IS HOLDING US BACK FROM 'HYPER-RENEWABLES'?

The **Discrete Point Particle** model of physics needs to yield to the **Wave Structure of Matter** so that we can understand and accept breakthrough non-linear technologies. There is a natural asymmetry in an open system which can allow limitless energy transfers.

Quantum Computing understands this and along with quantum electro-dynamics is allowing for wave structure models. Energy-Matter is a two way street. $E=mc^2$ needs re-contextualising.

<https://www.spaceandmotion.com/Wolff-Wave-Structure-Matter.htm>

A consciousness shift can guide a breakthrough Energy Shift

Acceptance of a new paradigm can in fact lead us away from a materialistic viewpoint.

“There would be no need for Oil or Lithium wars. Instead, new power-full inventions could cleanse the air we breathe and our waterways, and help restore local economies. Removing the energy scarcity belief would encourage rethinking priorities. When united, citizens could replace corrupt institutions and create life enhancing systems if they believe it is possible.

Wise governance of resources at bioregional and local levels, and regenerative agriculture are the how-to of harmony with nature, as I see it. Meaningful jobs and healthy family life are markers of success. New Energy systems are tools for building such a world.”

Jeanne Manning 2023

<https://www.amazon.co.uk/Hidden-Energy-Tesla-inspired-inventors-abundance/dp/1525549650>

APPENDIX 2

RENEWABLES

What actually is the life-cycle 'CO2/pollution' footprint of renewables vs 'fossil' etc?

Solar is improving (apart from the dirty elec). 3-4 year 'carbon' payback, but still about 10yr finance payback. Is battery tech evolving, it must Innovation will improve its footprint.

Renewables still don't have the energy density to efficiently do the work in some applications or to replace 'fossils' without huge volumes of material.

Very hard to replace aviation fuel with renewables – consider life cycle of renewables, not viable

<https://royalsociety.org/news/2023/02/net-zero-aviation-fuels-report/>

Hydrogen-powered flight is closer to takeoff than ever

Once dismissed as impractical, hydrogen fuel cell planes are showing new promise after a series of successful test flights. <https://apple.news/AqktpCE-QQoOxMXg0vzI5Zw>

The Future of Hydrogen Power Is Here — and These Stocks Are Leading the Charge

<https://finance.yahoo.com/news/future-hydrogen-power-stocks-leading-232145539.html>

Do Solar Panels Use More Energy to Manufacture than They Actually Produce?

<https://www.solarmelon.com/faqs/solar-panels-use-energy-manufacture-actually-produce/>

What Is the Carbon Footprint of Solar Panel Manufacturing?

<https://solarisrenewables.com/blog/carbon-footprint-of-solar-panel-manufacturing/#:~:text=Here%20are%20the%20most%20common,lbs%20of%20CO2%20per%20MMBtu>

Photovoltaic (PV) Solar Panels - Centre for Alternative Technology

<https://cat.org.uk/info-resources/free-information-service/energy/solar-photovoltaic/>

French drillers may have stumbled upon a mammoth hydrogen deposit

<https://apple.news/A0y0vMz3bQC-Y9stNMYqe6Q>

APPENDIX 3

WHAT HAPPENED TO THESE PREDICTIONS:

- Greta Thunberg Tweet 21st June 2018: "A TOP CLIMATE SCIENTIST IS WARNING THAT CLIMATE CHANGE WILL WIPE OUT ALL OF HUMANITY UNLESS WE STOP USING FOSSIL FUELS OVER THE NEXT FIVE YEARS."
- Paul Ehrlich 1969: New York Times "We must realise that unless we are extremely lucky, everybody will disappear in a cloud of blue steam in 20 years"
- In the 1960s climate change didn't mean global warming. It meant a new ice age
- The Boston Globe in 1970 "air pollution may obliterate the sun and cause a new ice age in the first third of the next century"
- 1972 Brown University's science dept wrote to the White House "deep concern with the future of the world [because this ice age]... falls within the rank of processes which produced the last ice age"
- 1974 The Guardian "Spy Satellites Show New Ice Age is coming Fast" – based on analysis carried out at Columbia University
- By 1980s when no excess cold happened, experts changed to excess heat. Now global warming
- Associated Press in 1989 "A senior UN environmental official says that entire nations could be wiped off the face of the earth by rising sea levels if the global warming trend is not reversed by the year 2000"

- March 2000 Independent “snow is starting to disappear from our lives... Children just aren’t going to know what snow is”
- 2004 The Guardian “Major European cities will be sunk beneath rising seas as Britain is plunged into a ‘Siberian’ climate by 2020”
- No longer too cold or too hot: just climate change
- 2006: Al Gore ‘An Inconvenient Truth’ – “the North Pole will be ice-free in the summer by 2012 because of man-made global warming”
- 2006 NBC News “leading US climate researcher says the world has a 10-year window of opportunity to take decisive action on global warming and avert catastrophe”
- 2008 Associated Press quoting a top NASA scientist “in five to 10 years, the Arctic will be free of sea ice in the summer
- 2009 John Kerry quoted same science in US Senate

APPENDIX 4

Conclusions from ‘[Global Warming Skepticism for Busy People](https://www.drroyspencer.com/2023/08/sitys-climate-models-do-not-conserve-mass-or-energy/)’ by Dr Roy Spencer
<https://www.drroyspencer.com/2023/08/sitys-climate-models-do-not-conserve-mass-or-energy/>

I have outlined what I consider to be the most compelling evidences that human-caused global warming and associated climate change are largely a non-problem. I have covered the “sceptics” position from my point of view; other sceptics will disagree with me on some of my arguments. That’s fine. Climate change is a relatively young area of scientific study, and it is one in which uncertainty remains for some obscure but critically important details. Most of the physics used to predict climate change can be right, yet the final prediction can be seriously in error.

None of the energy flows in and out of the climate system are known accurately enough to say how much of recent warming has been human-caused versus natural. The warming of the deep oceans since 2005 is equivalent to a tiny energy imbalance, 1 part in 260, and yet we don’t know any of the natural energy flows to a precision of better than 1 in 100.

Observed warming of the climate system (including the deep ocean) has been shown from energy budget studies to be consistent with low climate sensitivity, suggesting less than 2 deg. C of eventual warming resulting from a doubling of atmospheric CO₂. If some of the warming has been naturally caused – a possibility officially admitted to by the IPCC - then climate sensitivity will likely be below 1.5 deg. C.

Note that since these temperature changes (1.5 to 2 deg. C warming) are the actual UN goals for limiting future warming, those goals might well have already been met, simply

because the climate system is not as sensitive to increasing CO₂ as climate models suggest. It will be at least the 2060s before we reach 2xCO₂, and technological advancements by then might have already reduced out CO₂ emissions substantially. But even if we later exceed that “2xCO₂” level of CO₂ concentration in the atmosphere (550 ppm, versus ~275 ppm during the pre-industrial era), low climate sensitivity at a minimum means we have more time to come up with alternative energy technologies.

In contrast to the alarmist stories you read in the news media, note that such a weak level of warming is even consistent with the main conclusion of the IPCC, which is that humanity’s greenhouse gas emissions “are extremely likely to have been the dominant cause of the observed warming since the mid-20th century.” It is possible for this statement to be strictly true, and yet for climate sensitivity to be below 1 deg. C, in which case no one would be terribly alarmed. This shows how the “consensus of scientists” on warming has been conflated with agreement that disaster is imminent, when in fact there is abundant evidence that does not support alarmist conclusions.

This point is so important it bears repeating. **The core conclusion of the U.N. IPCC (about warming since 1950 being mostly human caused) can be entirely accurate, and yet the global warming threat can be virtually non-existent. The IPCC has become a master at instilling maximum alarm without supplying convincing reason for alarm. Alarm is instead based upon very speculative science which so far has little to no observational support.**

The IPCC habitually ignores evidence (such as that presented in this book) that does not support its alarmist narrative. The climate models that predict over 3 deg. C of average warming have been shown to be biased toward both assumed human causation and high climate sensitivity. While modelling is a necessary part of analyzing complex physical problems like climate, none of the natural energy flows in the climate system are known accurately enough to say that our 1–2% enhancement of the greenhouse effect is the dominant cause of recent warming. In other words, we do not know the physics of climate system responses to warming well enough to blame most of the warming on human activities.

Human causation is simply assumed.

The models are designed with the assumption that the climate system was in natural balance before the Industrial Revolution, despite historical evidence to the contrary. They only produce human-caused climate change because that is the way they are designed. This is in spite of abundant evidence of past warm episodes, such as 1,000- to 2,000-year-old tree stumps being uncovered by receding glaciers; temperature proxy evidence for the Roman and Medieval Warm Periods covering that same time frame; and Arctic sea ice proxy evidence for a natural decrease in sea ice starting well before humans could be blamed. Natural warming since the Little Ice Age of a few hundred years ago is simply ignored in the design of climate models, since we do not know what caused it.

Simply put, the computerized climate models support human causation of climate change because that’s what they assume from the outset. They are an example of circular reasoning.

There is little to no evidence of long-term increases in heat waves, droughts, or floods. Wildfire activity has, if anything, decreased, even though poor land management practices are now making some areas more vulnerable to wildfires even without climate change.

Contrary to popular perception and new reports, there is little to no evidence of increased storminess resulting from climate change. This includes tornadoes and hurricanes. Long-term increases in monetary storm damages have indeed occurred, but are due to increasing development, not worsening weather.

Sea level has been rising naturally since at least the mid-1800s, well before humans could be blamed. Land subsidence in some areas (e.g. Norfolk, Miami, Galveston-Houston, New Orleans) would result in increasing flooding problems even without any sea-level rise, let alone human-induced sea-level rise causing thermal expansion of the oceans. Some evidence for recent acceleration of sea-level rise might support human causation, but the magnitude of the human component since 1950 has been only 1 inch every 30 years.

Ocean acidification is now looking like a non-problem, as the evidence builds that sea life prefers somewhat more CO₂, just as vegetation on land does.

Given that CO₂ is necessary for life on Earth yet had been at dangerously low levels for thousands of years, the scientific community needs to stop accepting the premise that more CO₂ in the atmosphere is necessarily a bad thing. Global greening has been observed by satellites over the last few decades, which is during the period of most rapid rises in atmospheric CO₂. The benefits of increasing CO₂ to agriculture have been calculated to be in the trillions of dollars. Crop yields continue to break records around the world, due to a combination of human ingenuity and the direct effects of CO₂ on plant growth and water use efficiency.

Much of this evidence is not known by our citizens, who are largely misinformed by a news media that favours alarmist stories. The scientific community is, in general, biased toward alarmism in order to maintain careers and support desired governmental energy policies.

Only when the public becomes informed based upon evidence from both sides of the debate can we expect to make rational policy decisions. I hope my brief treatment of these subjects provides a step in that direction.

THE END