

The importance of Fossil Fuels and CO₂: A Scientific Perspective

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Charlotte, North Carolina

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¹All Views Expressed Are Strictly My Own and Should Be Yours Too

On CO₂, Frisbees and flatulence: All in the name of “air pollutant”?

“As the Court correctly points out, ‘all airborne compounds of whatever stripe,’ *ante*, at 26, would qualify as ‘physical, chemical, biological ... substance[s] or matter which [are] emitted into or otherwise ente[r] the ambient air,’ 42 U. S. C. §7602(g). It follows that *everything* airborne, from Frisbees to flatulence, qualifies as an ‘air pollutant.’ This reading of the statute defies common sense.”
– p. 10 of Justice Scalia’s dissenting opinion (April 2, 2007)

Massachusetts, et al. versus US EPA

Supreme Court

Alito: 'A pollutant is a subject that is harmful to ordinary things, to human beings, or to animals or to plants.'

By: [Marc Morano](#) - [Climate Depot](#) with [CFACT](#)

Via: <http://www.scotusmap.com/posts/2>

Justice Samuel Alito's remarks at the Claremont Institute's 2017 annual dinner in honor of Sir Winston S. Churchill.



Alito: “Now, what is a pollutant? A pollutant is a subject that is harmful to human beings or to animals or to plants. Carbon dioxide is not a pollutant. Carbon dioxide is not harmful to ordinary things, to human beings, or to animals, or to plants. It’s actually needed for plant growth. All of us are exhaling carbon dioxide right now. So, if it’s a pollutant, we’re all polluting.”

On February 11th, 2017, Justice Samuel Alito received the Statesmanship Award and delivered the keynote speech at the [Claremont Institute's 2017 annual dinner](#) in honor of Sir Winston S. Churchill. [Diane Lenning](#) has posted video clips of the speech to [her YouTube page](#).

“To call CO₂ a pollutant
is a corruption of
the English language;
plants do not call it a
pollutant—they call it
dinner.” - Anonymous



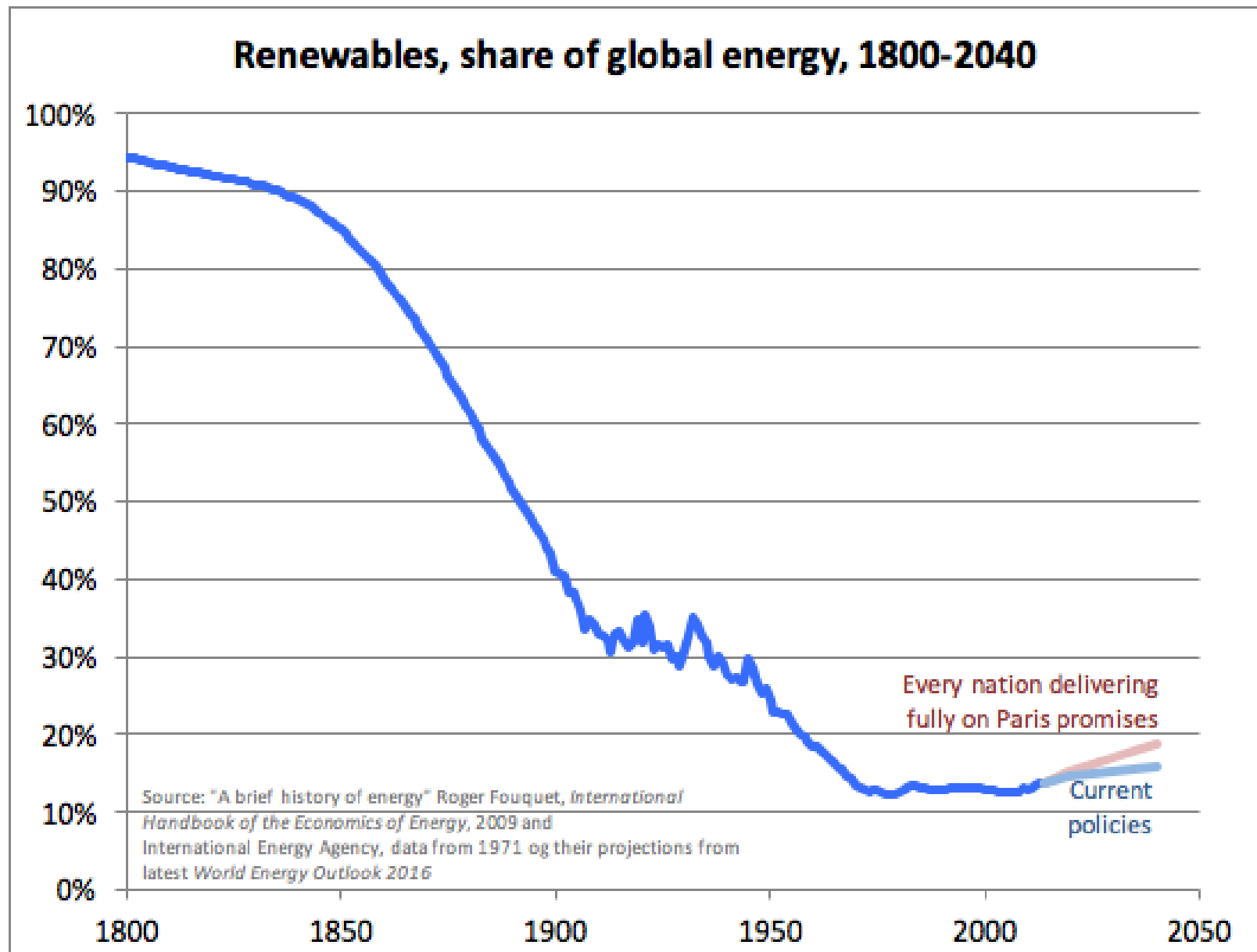
Science perspective is rising?

The Open Secret of Energy Sources: Energy Density

The beginning of the transition from wood to coal in the Elizabethan era allowed us to escape from the photosynthetic limit of diffuse biomass. This was followed much later by oil, methane (natural gas) and now uranium. **Each new fuel has a higher energy density** and lower carbon intensity **than the last**, with methane releasing about half as much carbon dioxide as coal per unit of energy produced and nuclear being essentially carbon-free. ... **An energy transition that leads to more expensive, less efficient energy production is more a regression than a revolution.**
— *Professor Colin Robert McInnes*

Source: The Royal Academy of Engineering
<http://www.ingenia.org.uk/Ingenia/Articles/740>

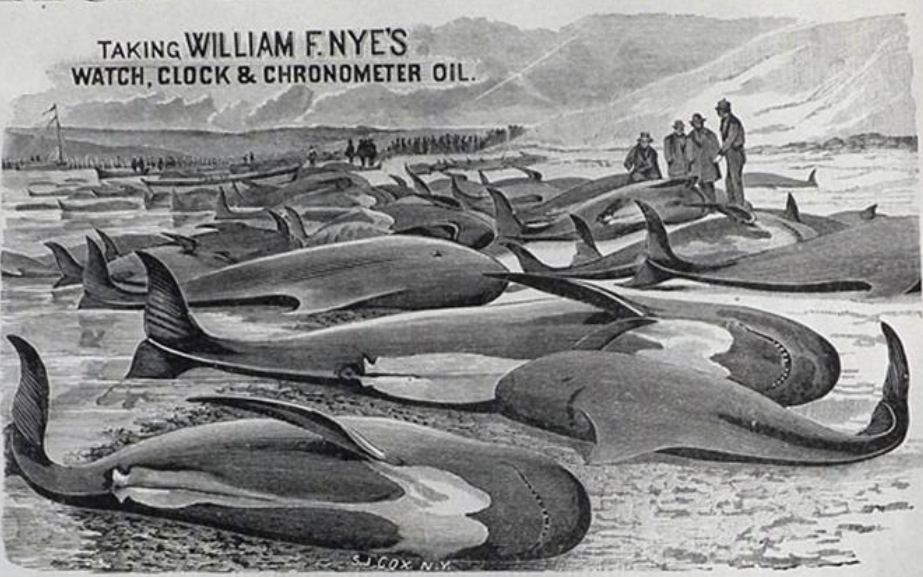
Return to the Dark Ages: The world has been successfully running away from “renewable” energy for 200+ years



Maybe you prefer Whale Oil?

WATCH AND CLOCK OILS.

TAKING WILLIAM F. NYE'S
WATCH, CLOCK & CHRONOMETER OIL.



These Oils are now universally used and stand acknowledged the best. They are beautifully clear and brilliant, standing all tests.

WILLIAM F. NYE, New Bedford, Massachusetts, U. S. A.

**SEATTLE SOAP COMPANY'S
WHALE OIL
SOAP**



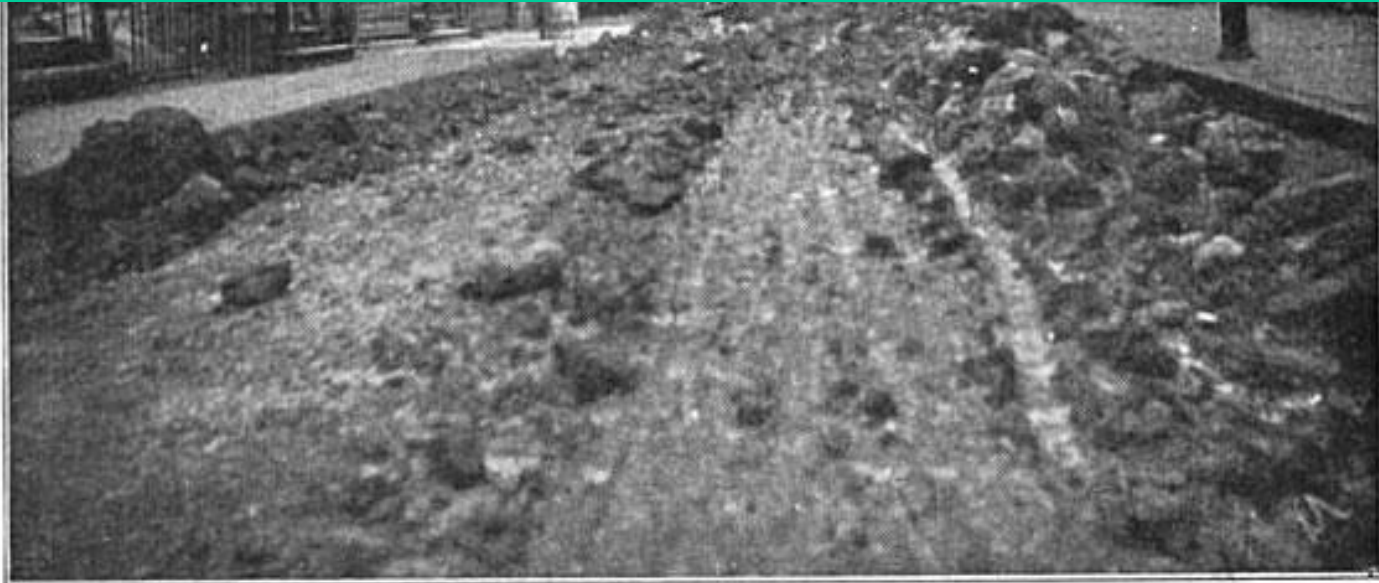
SEATTLE, WASH.
(GUARANTEED PURE) CLAGUE

1886: <https://blog.underoverarch.co.nz/2017/09/the-spoils-of-oils>

1894: https://commons.wikimedia.org/wiki/File:Whale_Oil_Soap_%281894%29_%28ADVERT_405%29_%28cropped%29.jpeg

Heard of “The Great Horse Manure Crisis of 1894”?

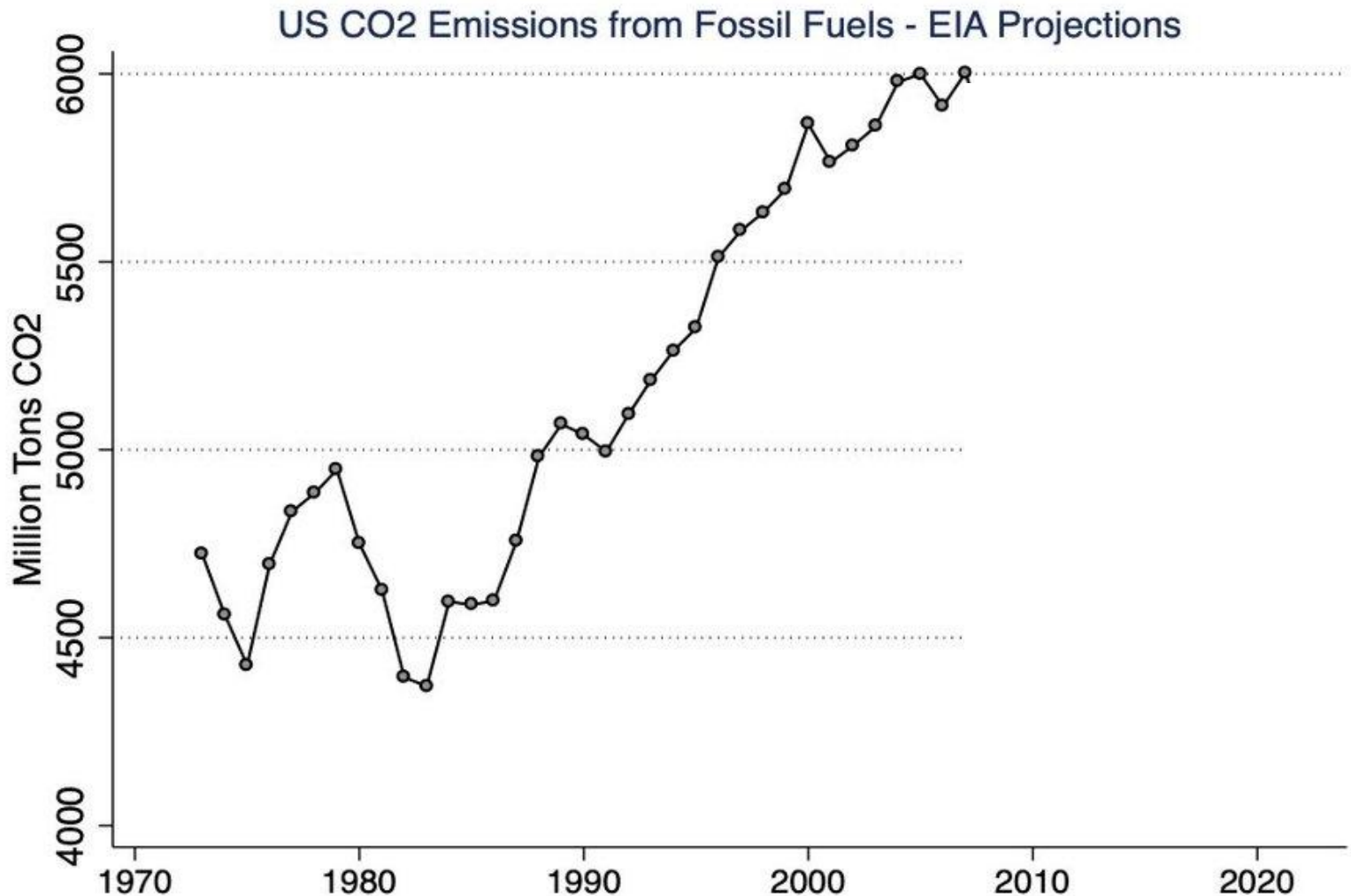
In New York in 1900,
the population of 100,000 horses
produced 2.5 million pounds of
horse manure per day.



MORTON STREET, CORNER OF BEDFORD, LOOKING TOWARD BLEECKER STREET,
MARCH 17, 1893.

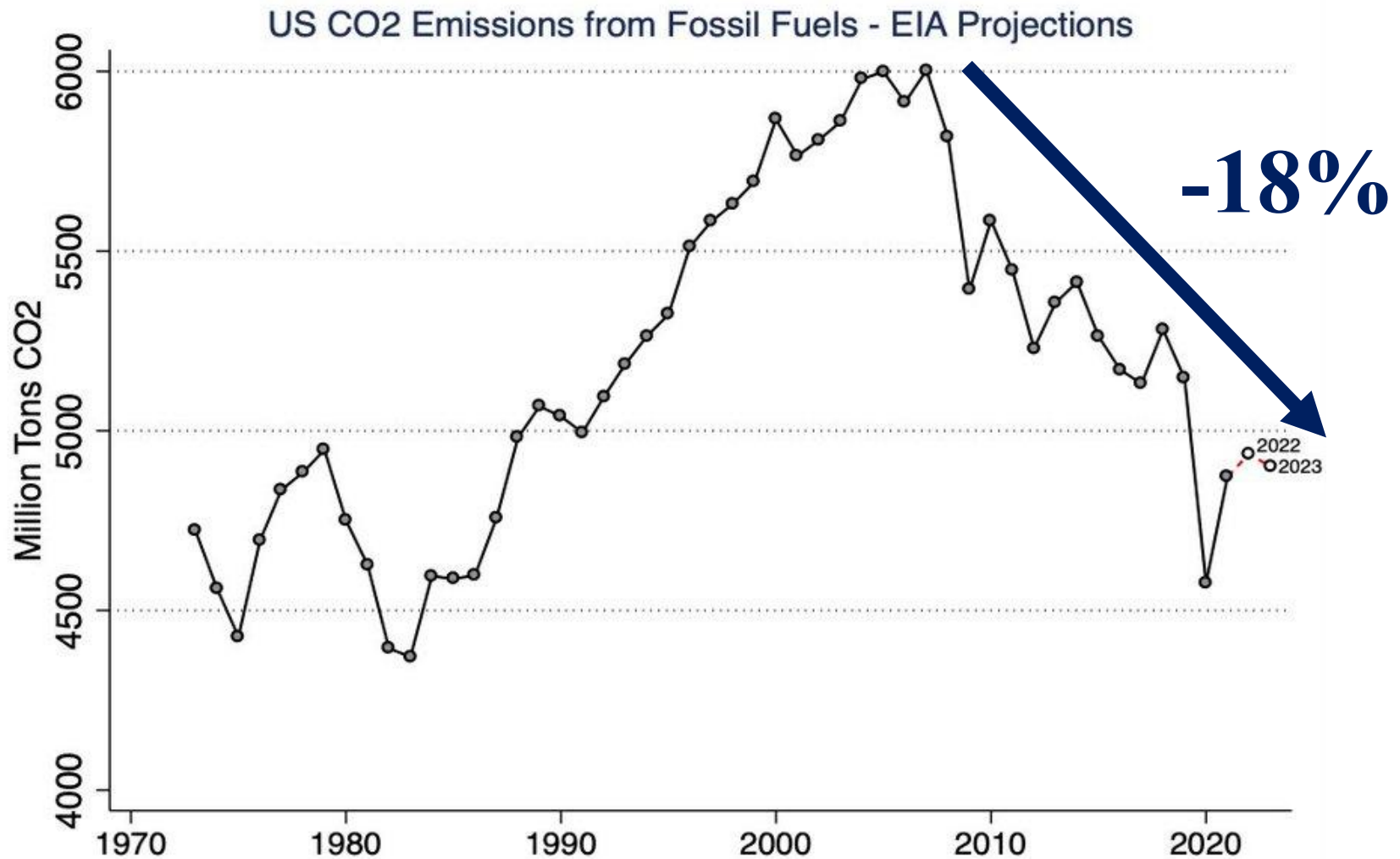
How about CO₂
emissions from
all human activity
sources?

The US CO₂ emissions from fossil fuels from 1970s till about 2005-2008 or so



Source: <https://twitter.com/hausfath/status/1544543051749548034> (July

Is it a big surprise that US CO₂ emissions have been 18% below the mid-2000s peak ?

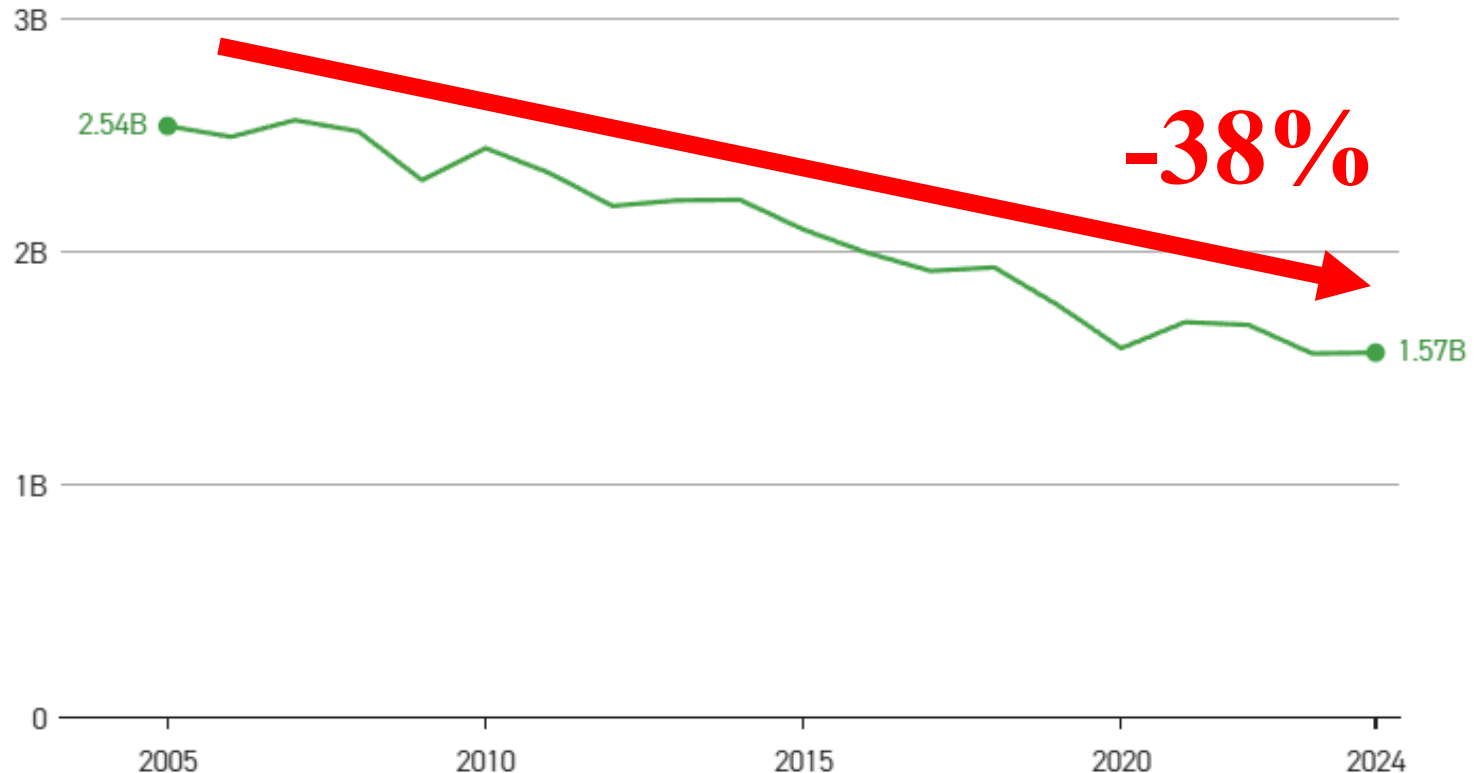


2025 Update on Regulation of US CO₂ Emissions

POLITICO

U.S. power plant emissions fell by 38% between 2005 and 2024

U.S. power plant emissions in CO₂ mass from 2005-2024, short tons



Note: Data does not include emissions from Alaska and Hawaii.

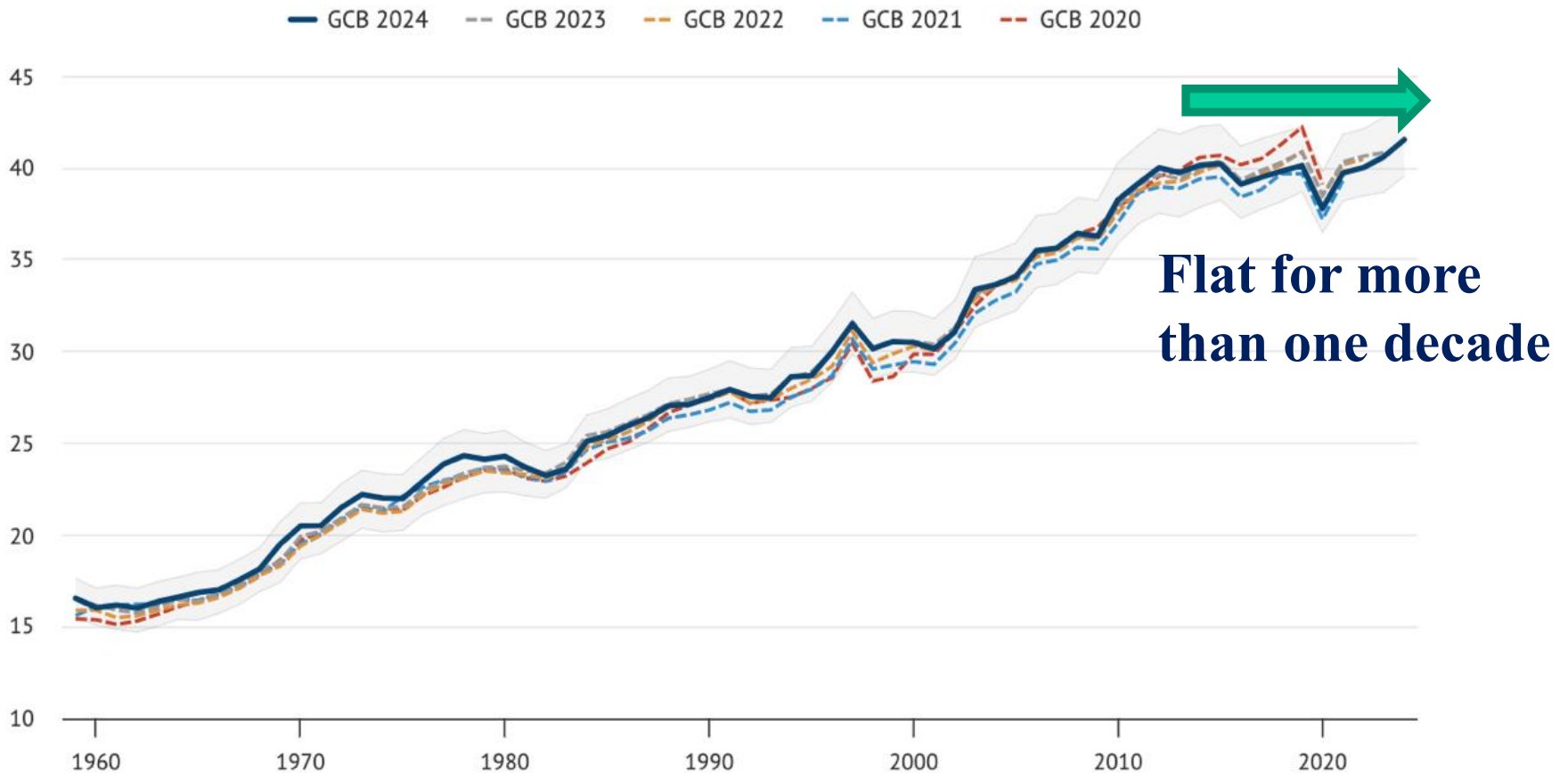
Source: EPA Clean Air Markets

Claudine Hellmuth/POLITICO

Global CO₂ emissions have been flat for more than a decade: One big surprise?

Global CO₂ emissions (fossil and land use) from the past five Global Carbon Budgets

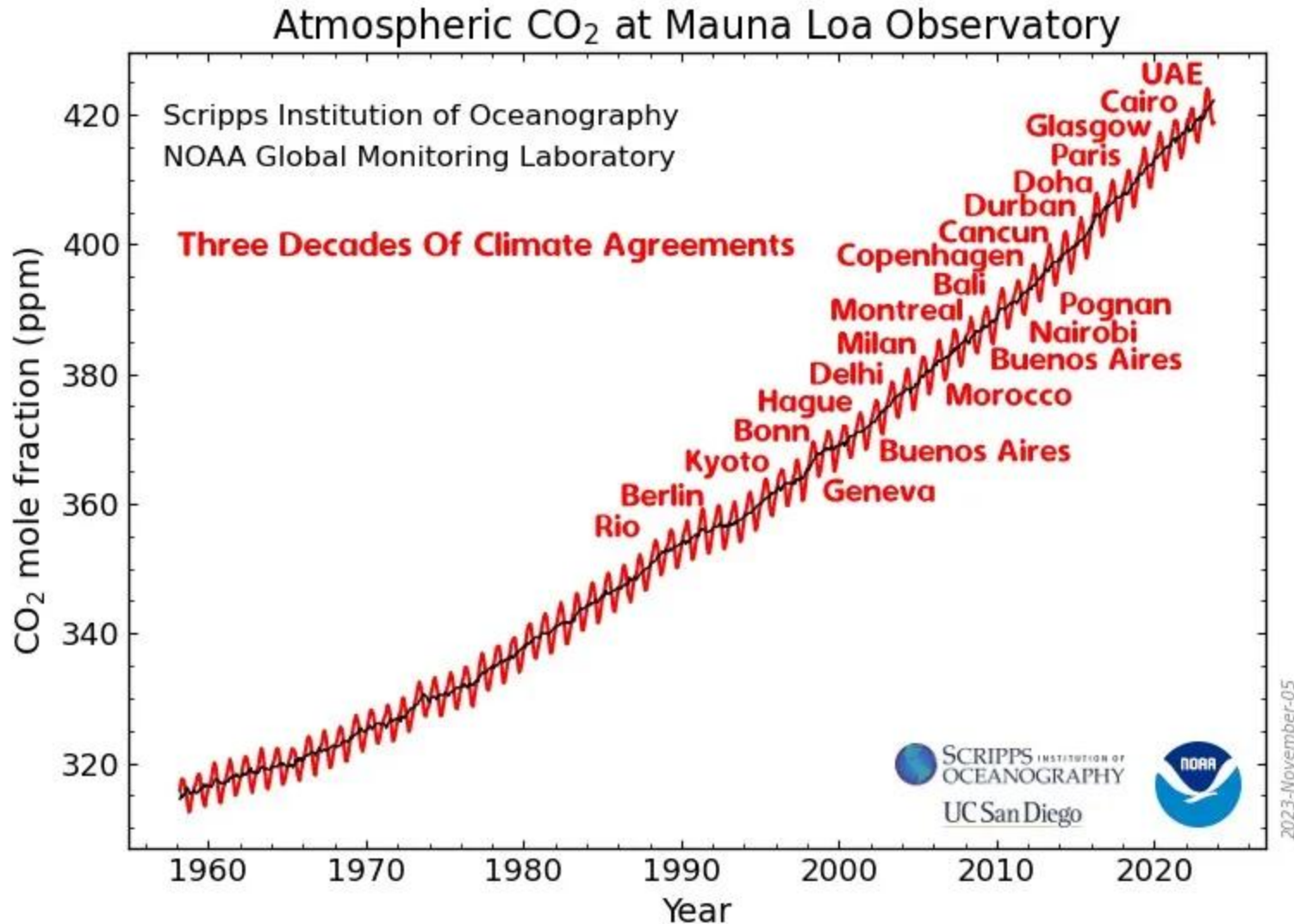
Global CO₂ Emissions, GtCO₂



Source: Global Carbon Project

CarbonBrief
CLEAR ON CLIMATE

So why is the atmospheric CO₂ is still rising? (after 3.5 decades of political “consensus”)





We Can Tax the Air

Climate change? We pee on your legs
and tell you it's raining!!!

<https://x.com/NichollsDb3/status/1956162242505789884>



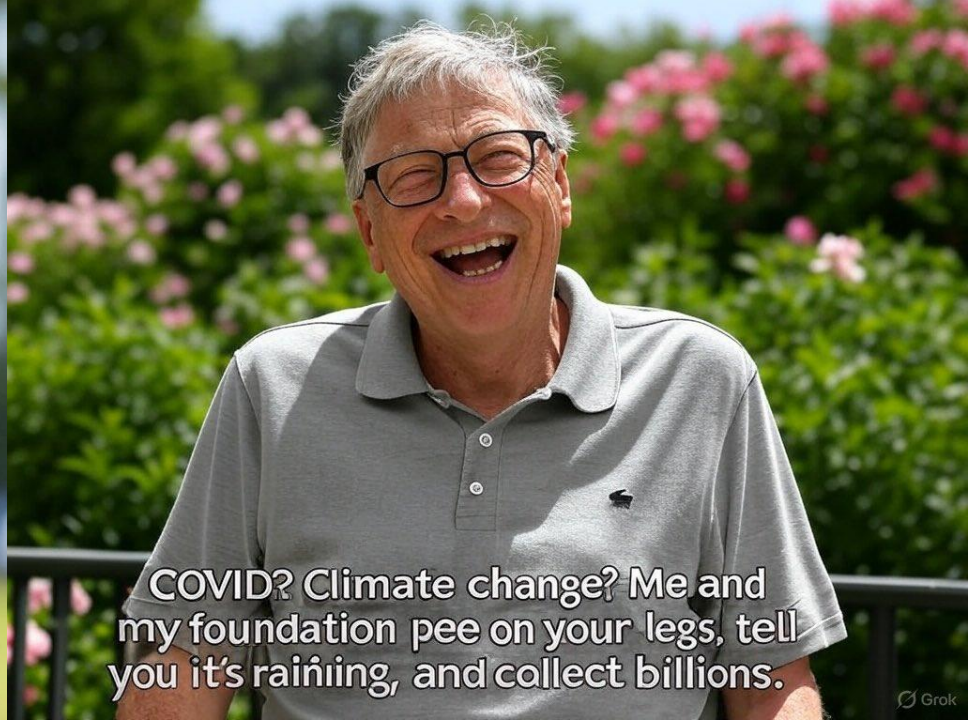
Climate change? We pee on your legs
and tell you it's raining!

GROK X



Climate change? I pee on your legs and tell you it's
raining while I buy a beach front mansion!

Grok



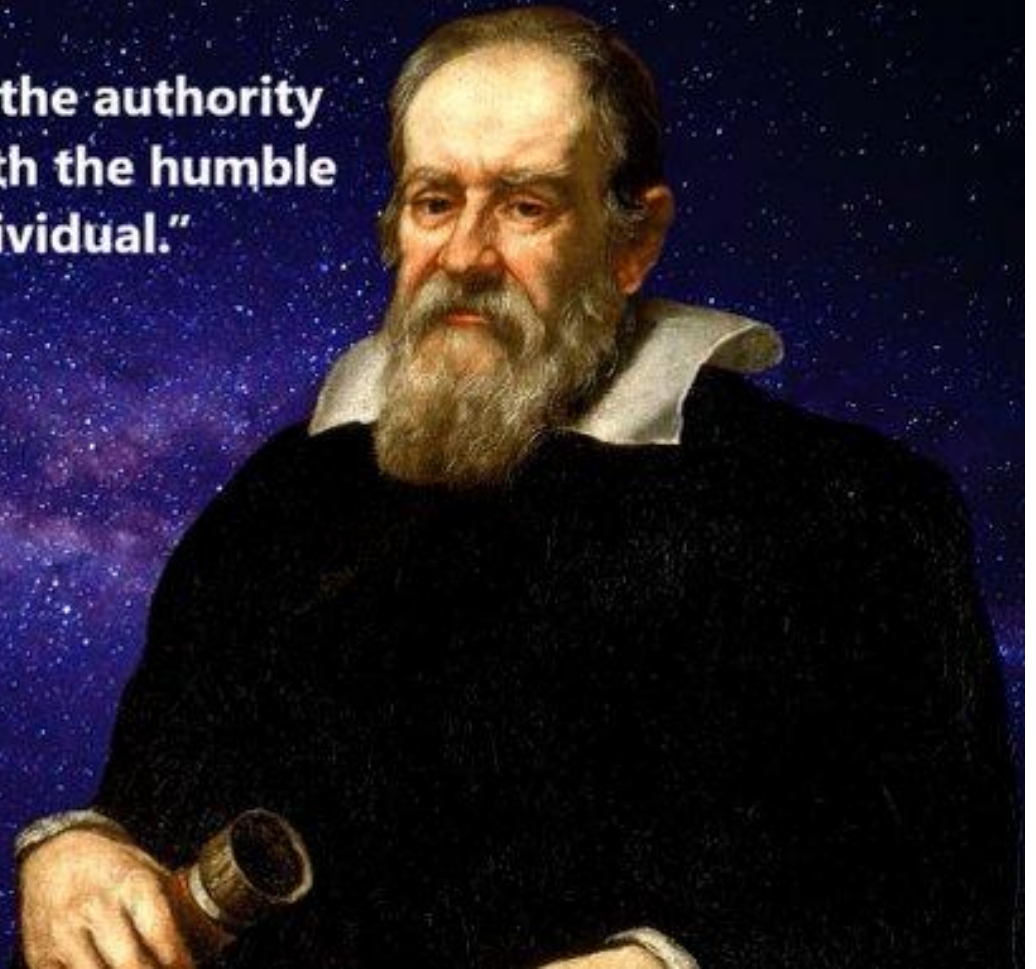
COVID? Climate change? Me and
my foundation pee on your legs, tell
you it's raining, and collect billions.

Grok

Isn't it true and
correct that rising
atmospheric CO₂
is causing
“global boiling”?

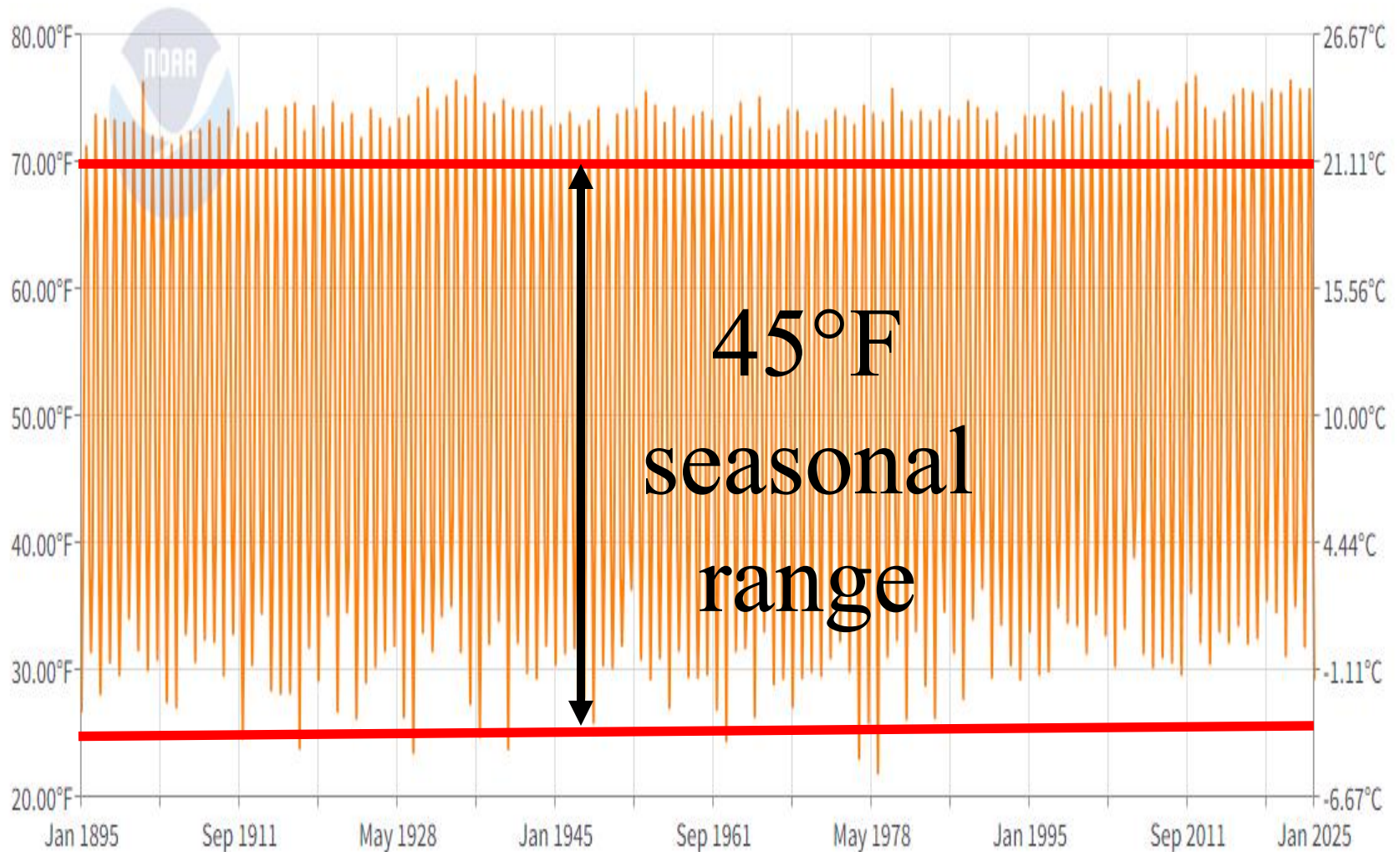
**"In questions of science, the authority
of a thousand is not worth the humble
reasoning of a single individual."**

Galileo Galilei



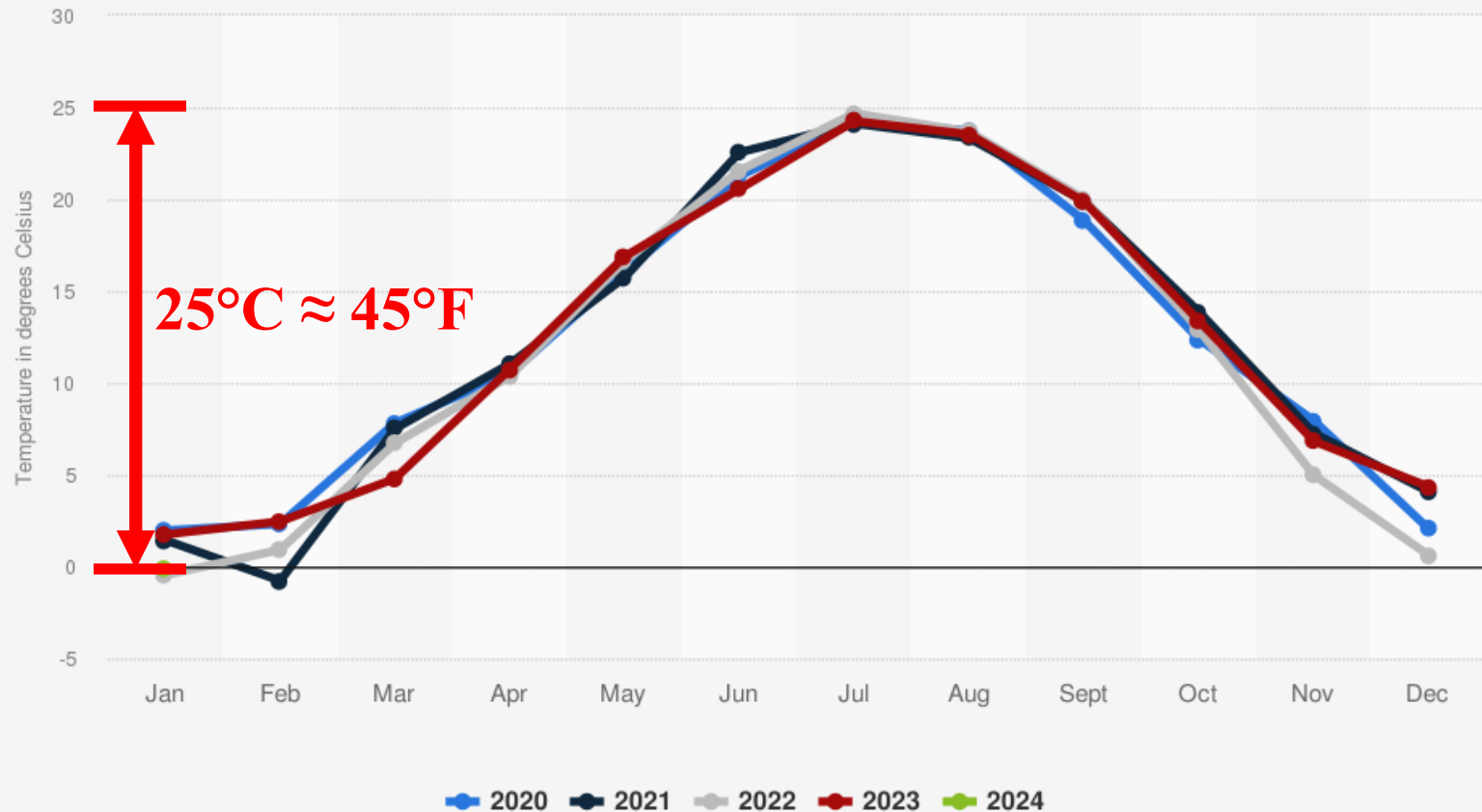
100% confident that it is impossible to find CO₂ in USA Records

Contiguous U.S. Average Temperature



The Seasonal Solar Radiation and Seasonal US temperatures

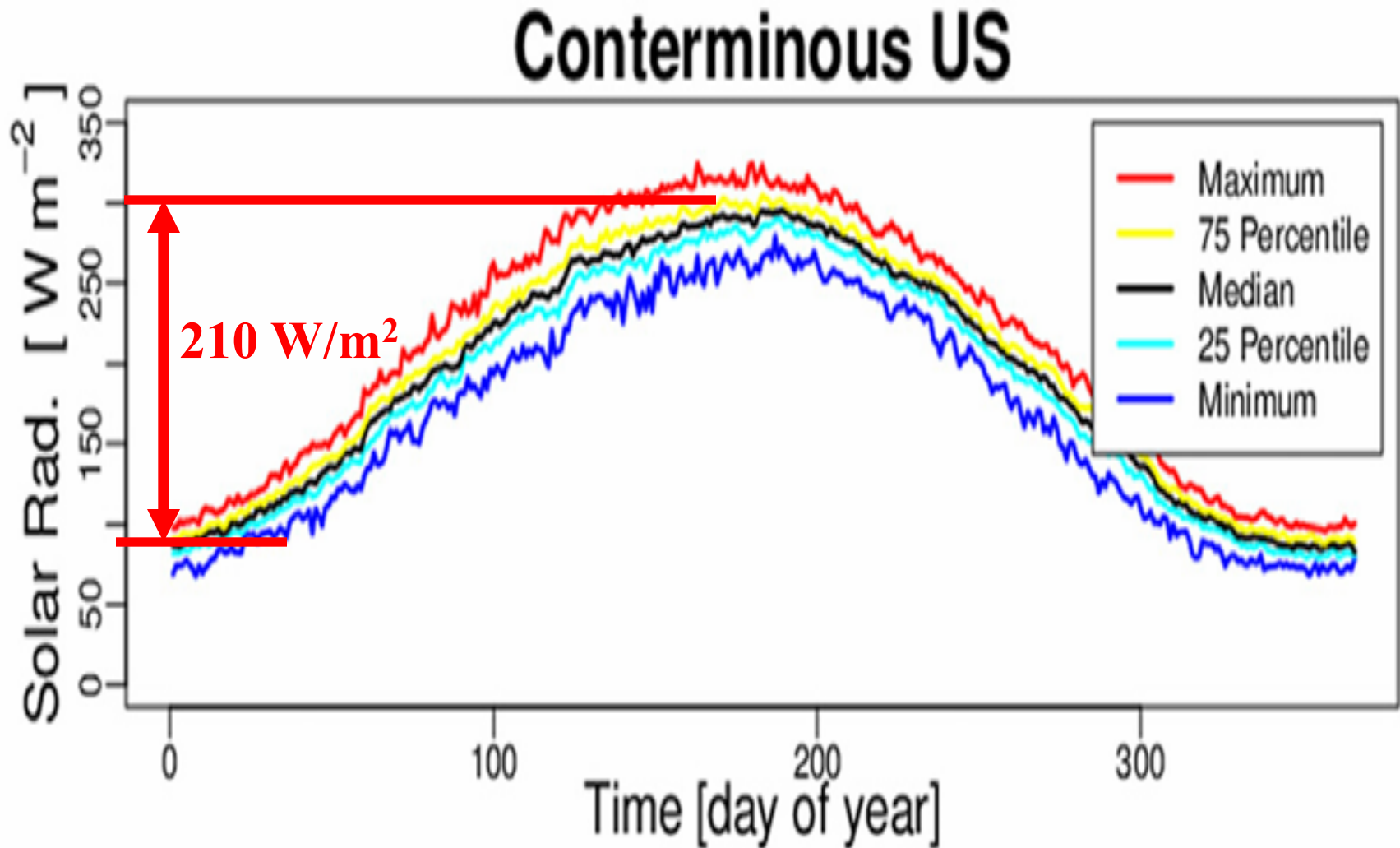
Average monthly temperature in the United States from January 2020 to January 2024
(in degrees Celsius)



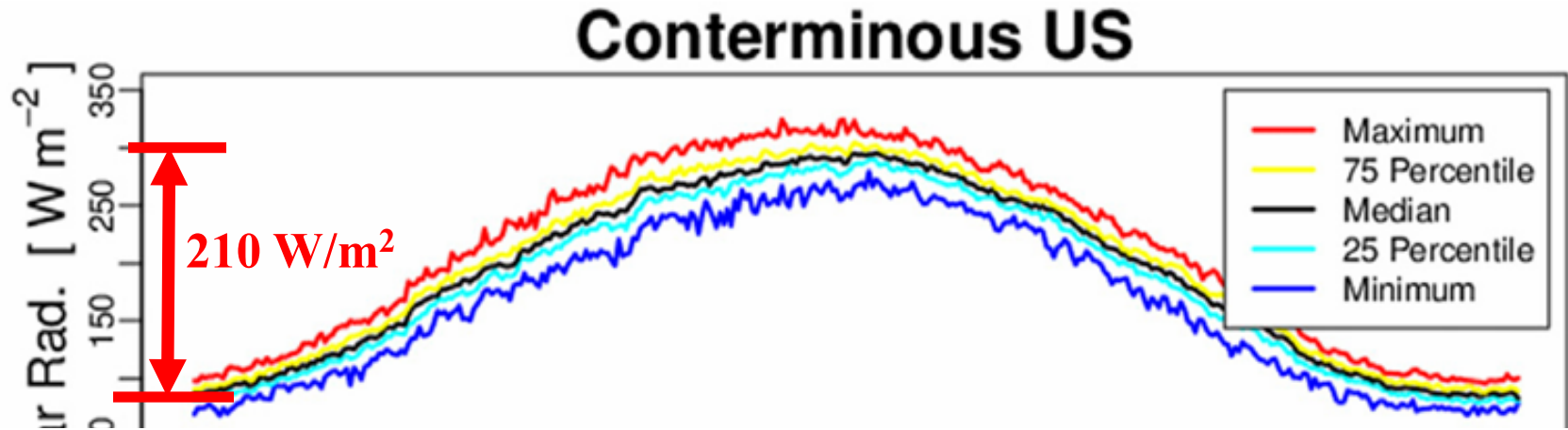
Source
National Oceanic and Atmospheric Administration
© Statista 2024

Additional Information:
United States; January 2020 to January 2024

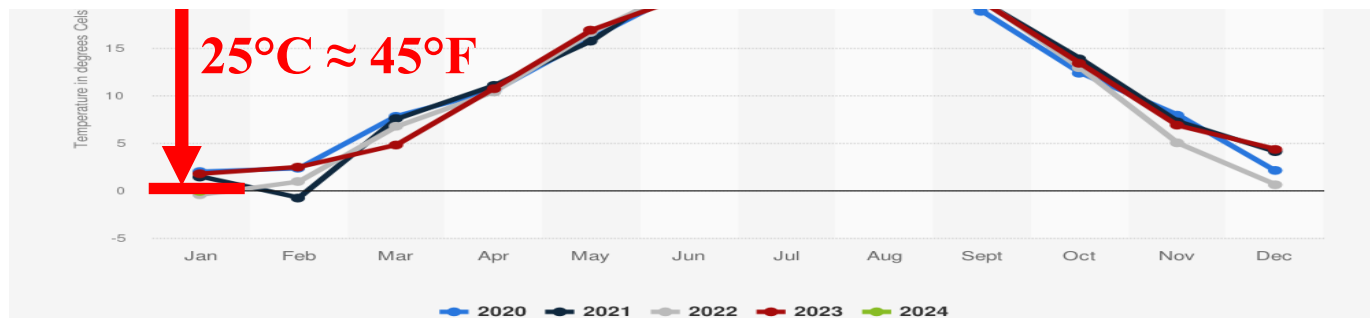
The Seasonal Solar Radiation and Seasonal US temperatures



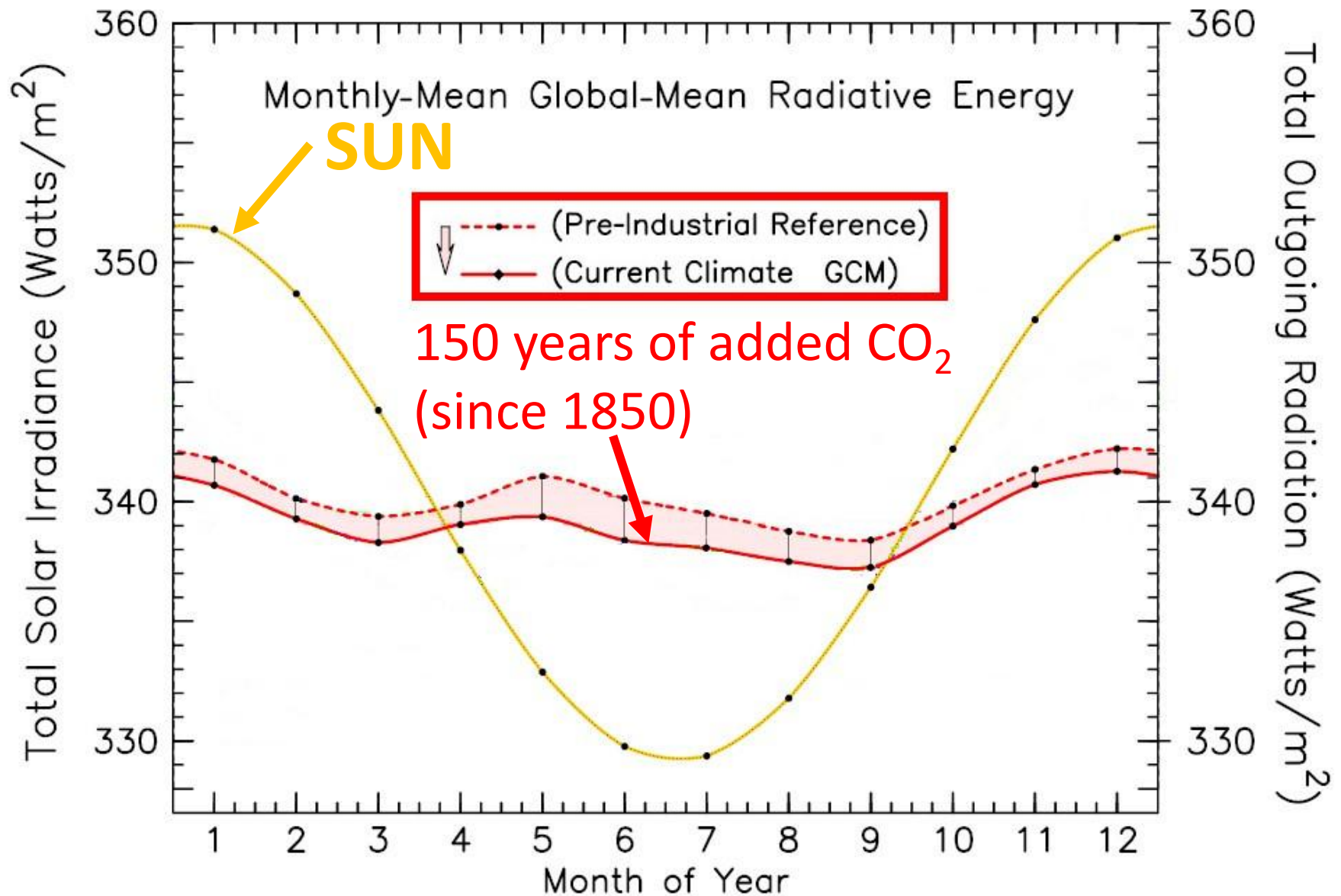
The Seasonal Solar Radiation and Seasonal US temperatures



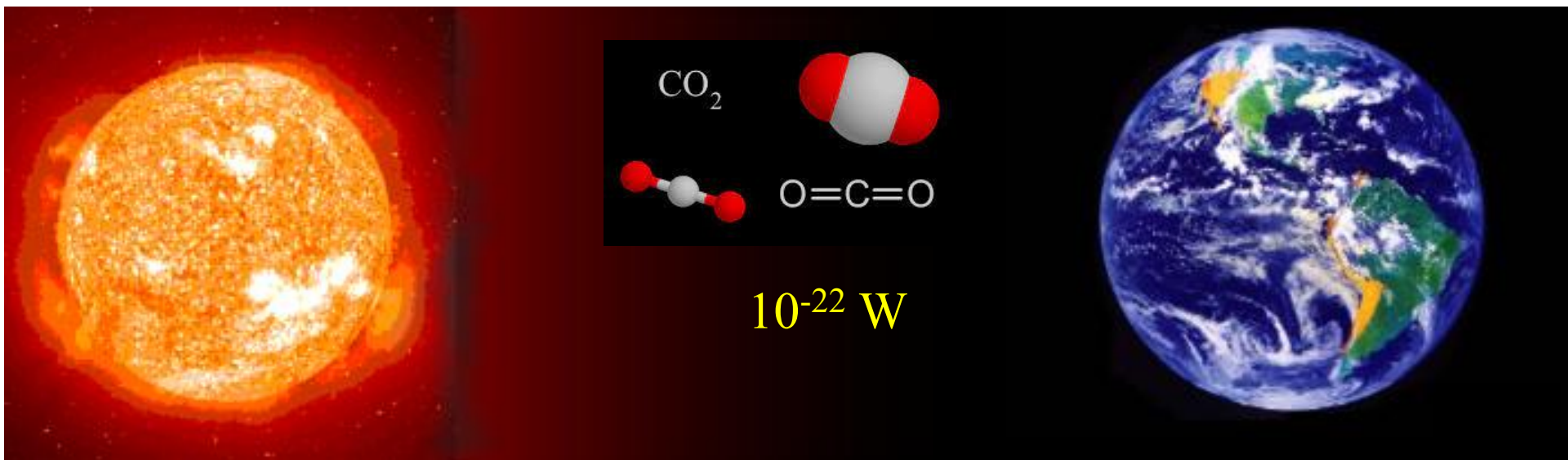
Implying $0.5\text{ }^{\circ}\text{C} \approx 0.9^{\circ}\text{F}$
for doubling of CO_2



Hunting for CO₂: Where is it?



The weather-climate system is powered by solar energy



Power: $4 \times 10^{26} \text{ W}$

(Earth is 2 billion times weaker)

$2 \times 10^{17} \text{ W}$ (mainly converted solar power!)

radiogenic heat = $2 \times 10^{13} \text{ W}^a$

(world most powerful laser: $5\text{-}10 \times 10^{15} \text{ W}$; 100 petawatts pulse coming*)

Adapted from Jurg Beer 2007's presentation with improvements by Willie Soon

*Ruxin Li, Shanghai Superintense Ultrafast Laser Facility (January 24, 2018 Science Magazine News)

^aKamLAND Collaboration et al. (2011) Nature Geoscience, vol. 4, 647-651; Alimonti et al. (2009) Nuclear Instruments and Methods in Physics A, vol. 600, 568-593

What is climate?

Examine CO₂ within the
context of energy flows

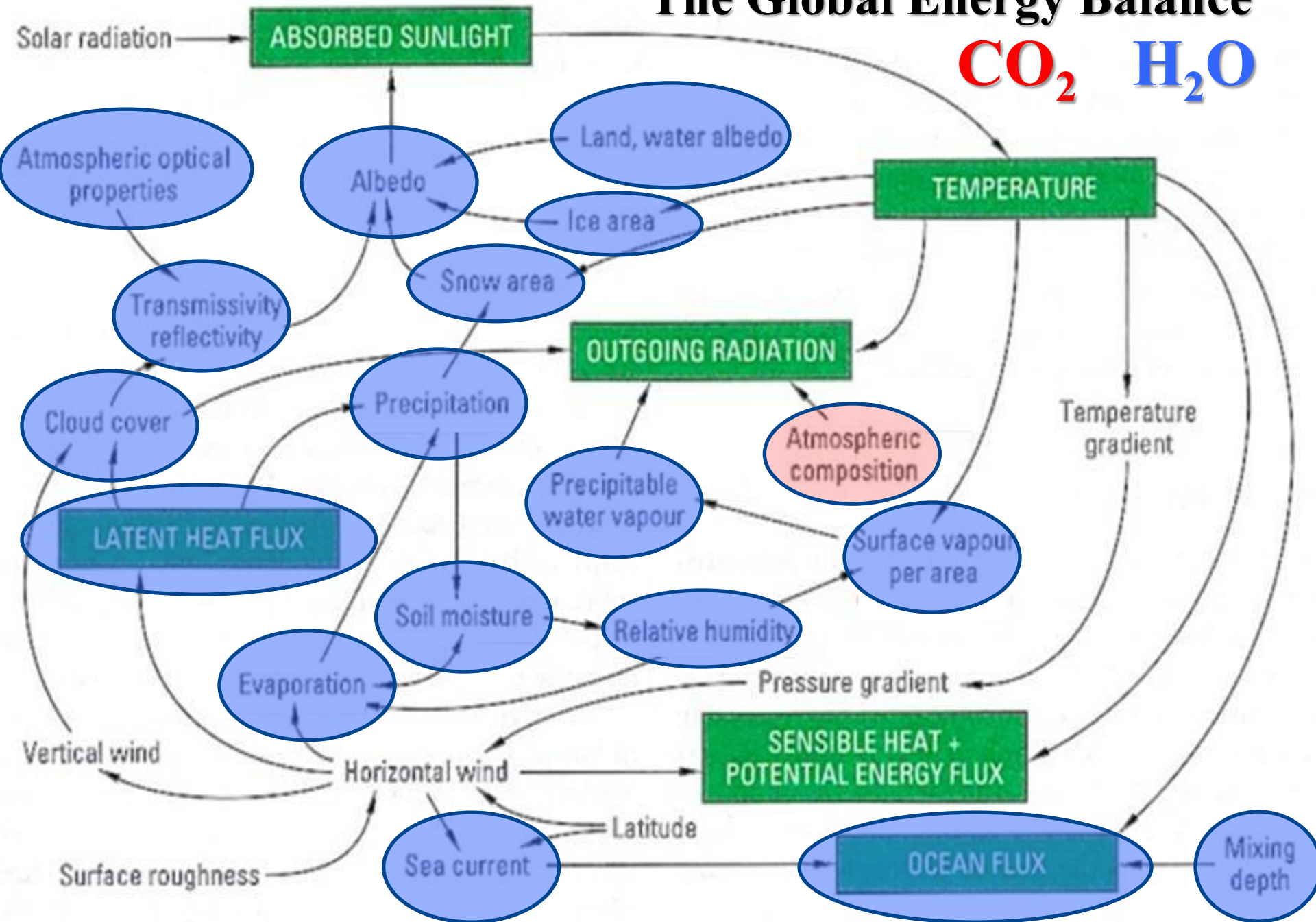


~~Carbon Dioxide~~

(Vapor, Ice, Snow, Liquid)

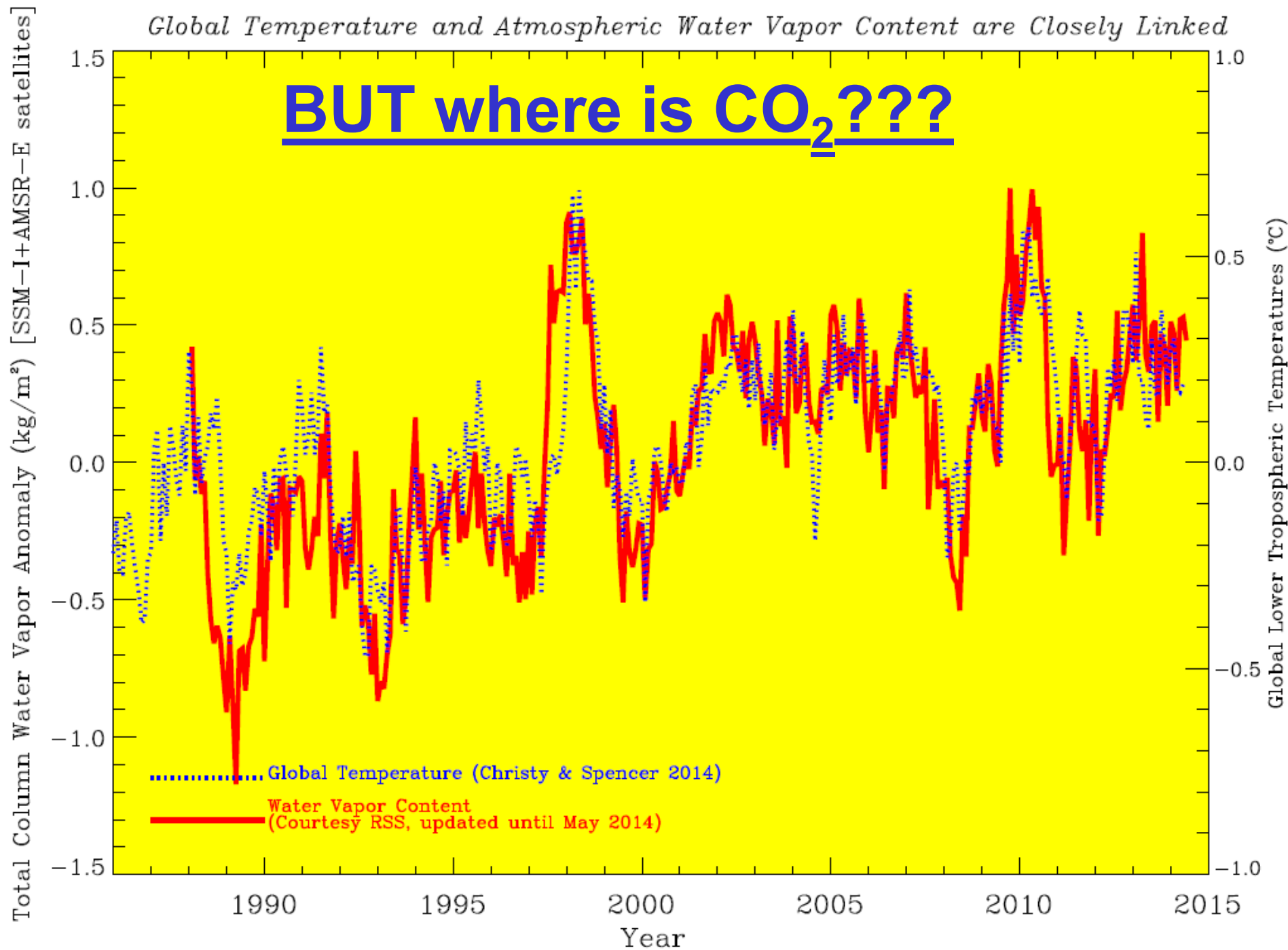
The Global Energy Balance

CO_2 H_2O



Global Temperature and Atmospheric Water Vapor Content are Closely Linked

BUT where is CO₂???



Intercomparison of the role of H₂O+Clouds and CO₂ in Atmospheric GreenHouse Effects

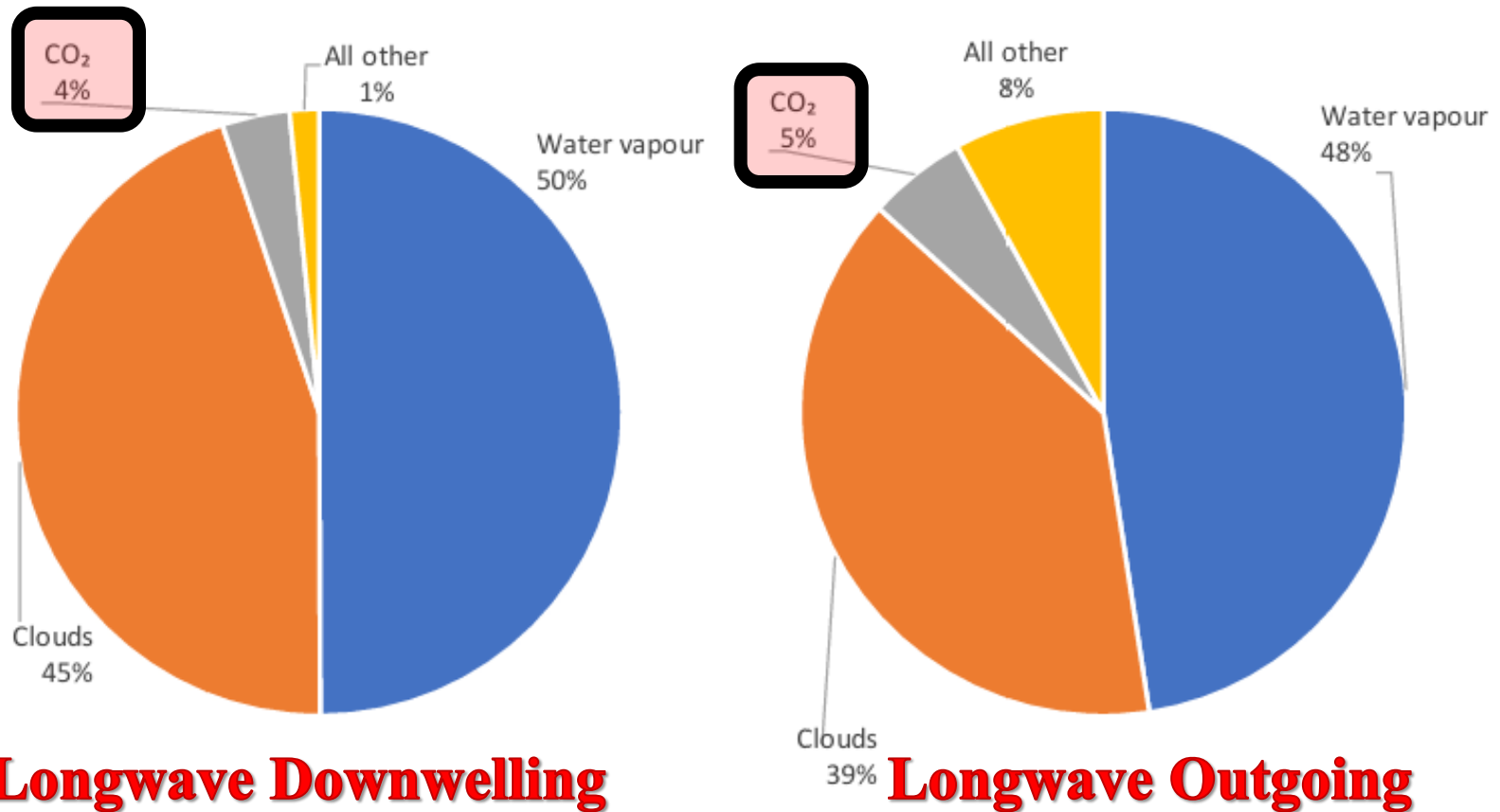


Figure 24: Contribution of the greenhouse drivers to the LW radiation fluxes, (left) downwelling and (right) outgoing.

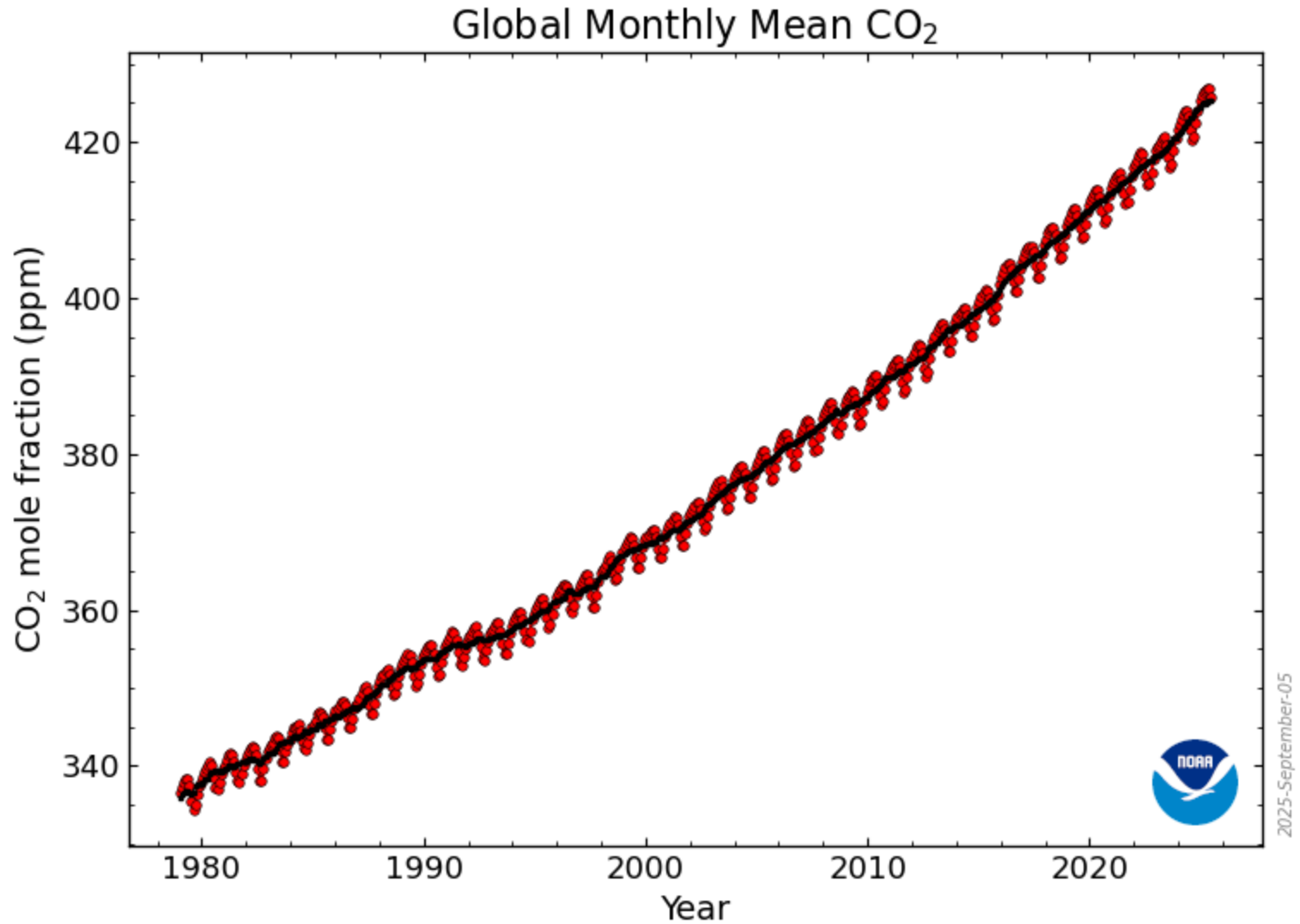
**Evil Man-Made
H₂O**



**Natural
H₂O**



What is the air's CO₂ doing now?



<https://gml.noaa.gov/ccgg/trends/global.html>

SCIENTIFIC REPORTS

OPEN

A Hiatus of the Greenhouse Effect

Jinjie Song, Yuan Wang & Jianping Tang

Received: 17 February 2016

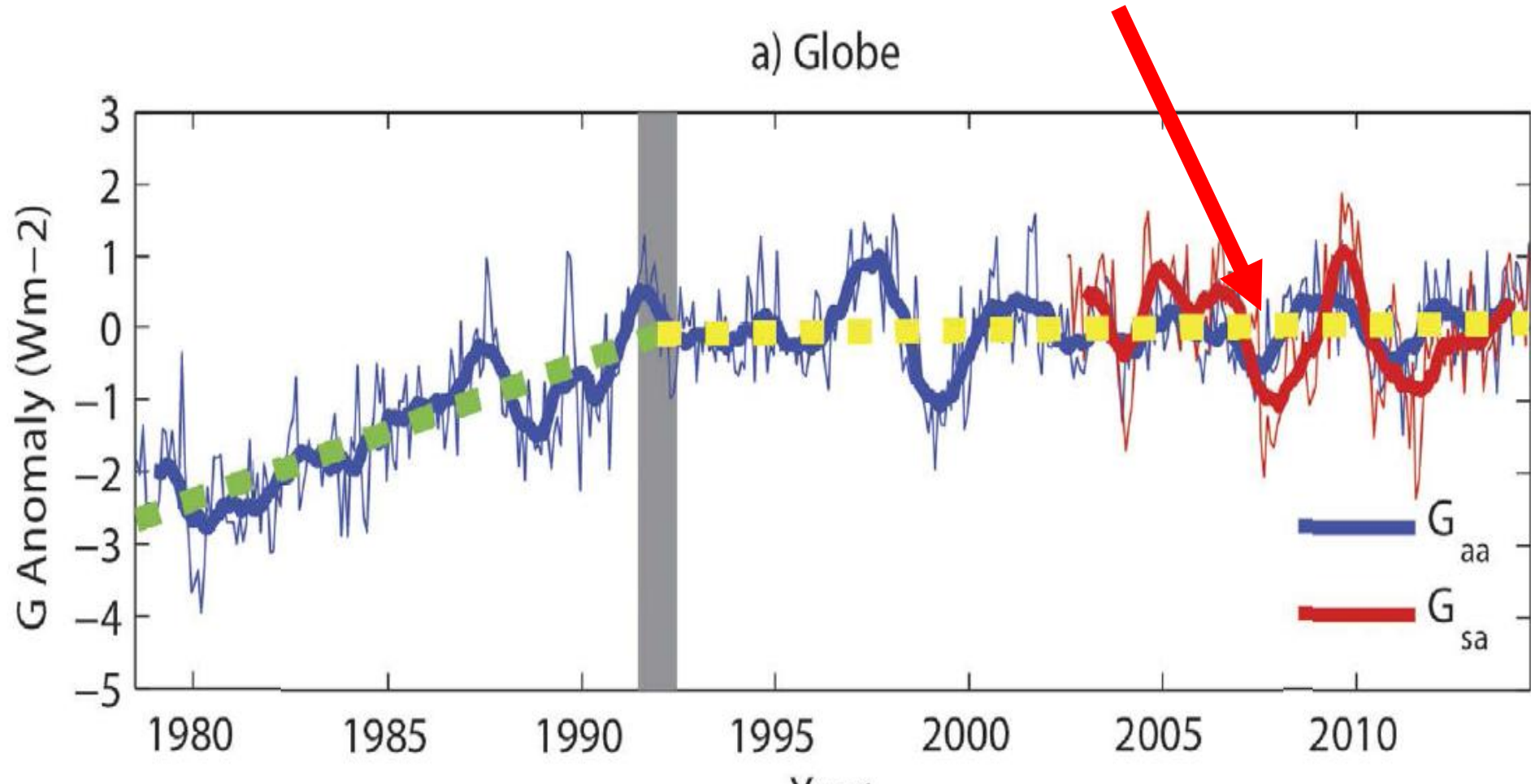
Accepted: 24 August 2016

Published: 12 September 2016

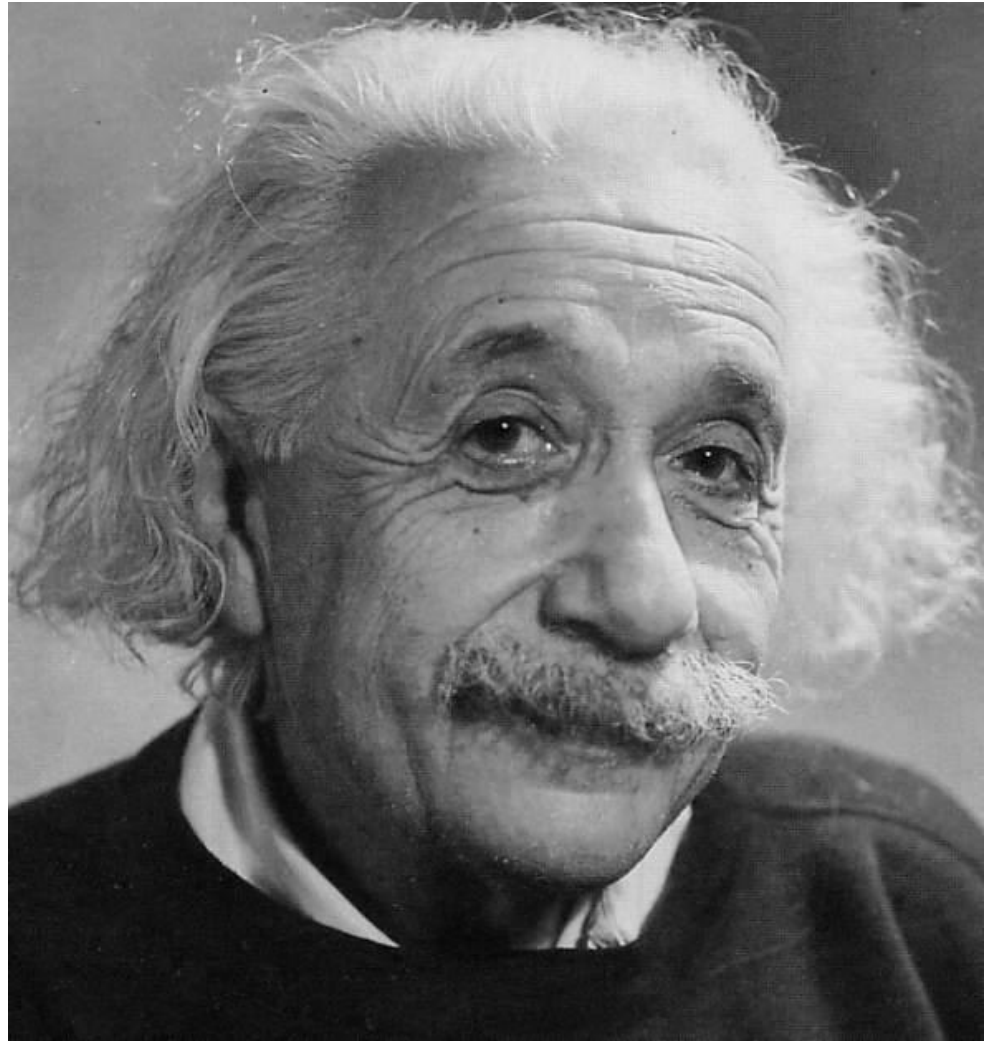
The rate at which the global average surface temperature is increasing has slowed down since the end of the last century. This study investigates whether this warming hiatus results from a change in the well-known greenhouse effect. Using long-term, reliable, and consistent observational data from the Earth's surface and the top of the atmosphere (TOA), two monthly gridded atmospheric and surface greenhouse effect parameters (G_a and G_s) are estimated to represent the radiative warming effects of the atmosphere and the surface in the infrared range from 1979 to 2014. The atmospheric and surface greenhouse effect over the tropical monsoon-prone regions is found to contribute substantially to the global total. Furthermore, the downward tendency of cloud activity leads to a greenhouse effect hiatus after the early 1990s, prior to the warming pause. Additionally, this pause in the greenhouse effect is mostly caused by the high number of La Niña events between 1991 and 2014. A strong La Niña indicates suppressed convection in the tropical central Pacific that reduces atmospheric water vapor content and cloud volume. This significantly weakened regional greenhouse effect offsets the enhanced warming influence in other places and decelerates the rising global greenhouse effect. This work suggests that the greenhouse effect hiatus can be served as an additional factor to cause the recent global warming slowdown.

What about the “Greenhouse Effect”?

It is flattening (not rising rapidly) and that the effect is dominated by the self-cancellation effects between water vapor and clouds but not by rising atmospheric CO₂



**“No amount of
experimentation
can ever prove me
right; a single
experiment can
prove me wrong.”**

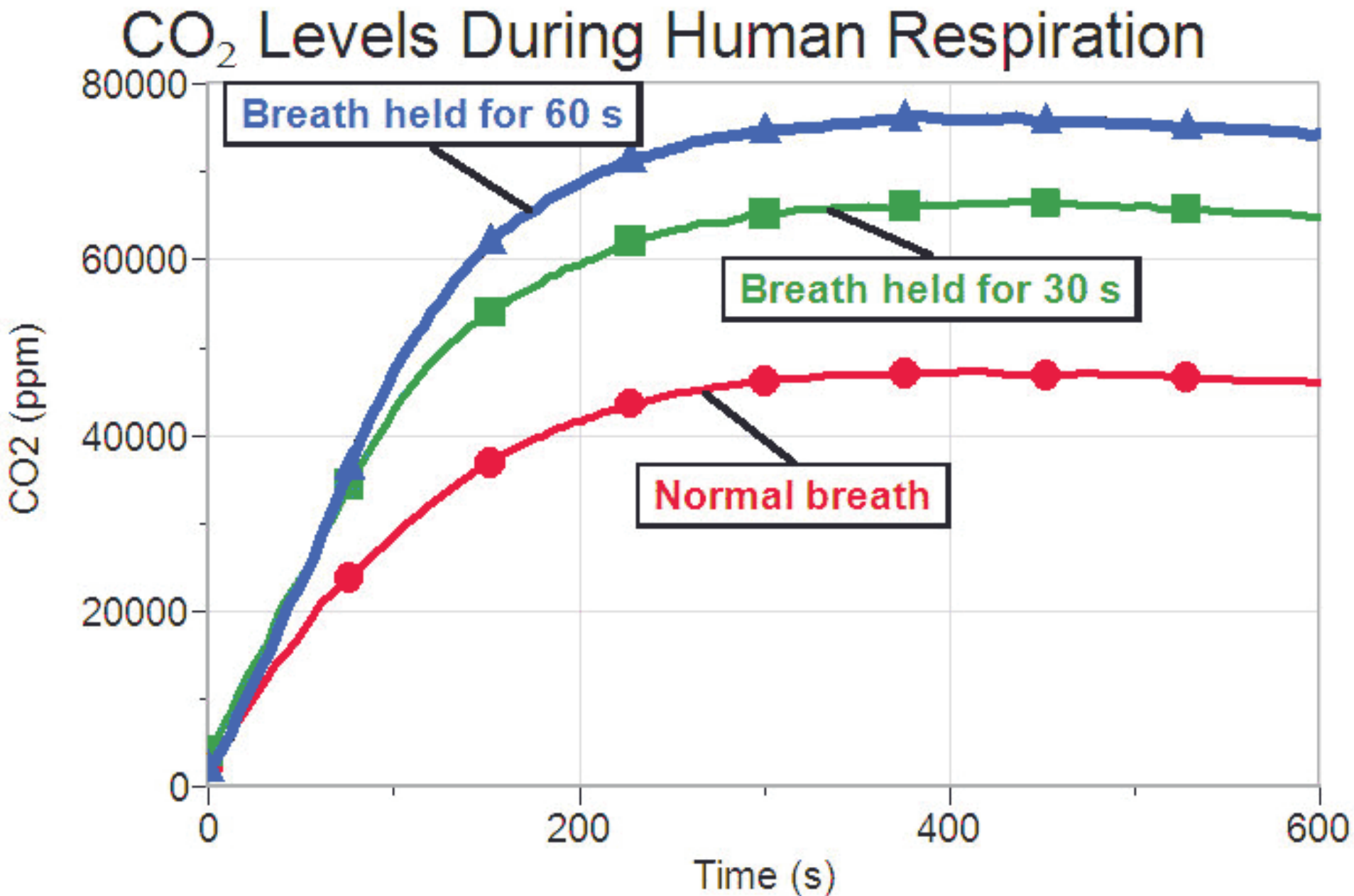


Albert Einstein

CO₂ is a gas of life: Biosphere



CO₂ is not a pollutant



More context on CO₂

CO₂



Average

**Abundant
Life**

**Space
Station**

**Naval
Submarines**

Death

Today

140 ppm

400 ppm

1,600 ppm

4,000 ppm

5,000 ppm

8,000 ppm

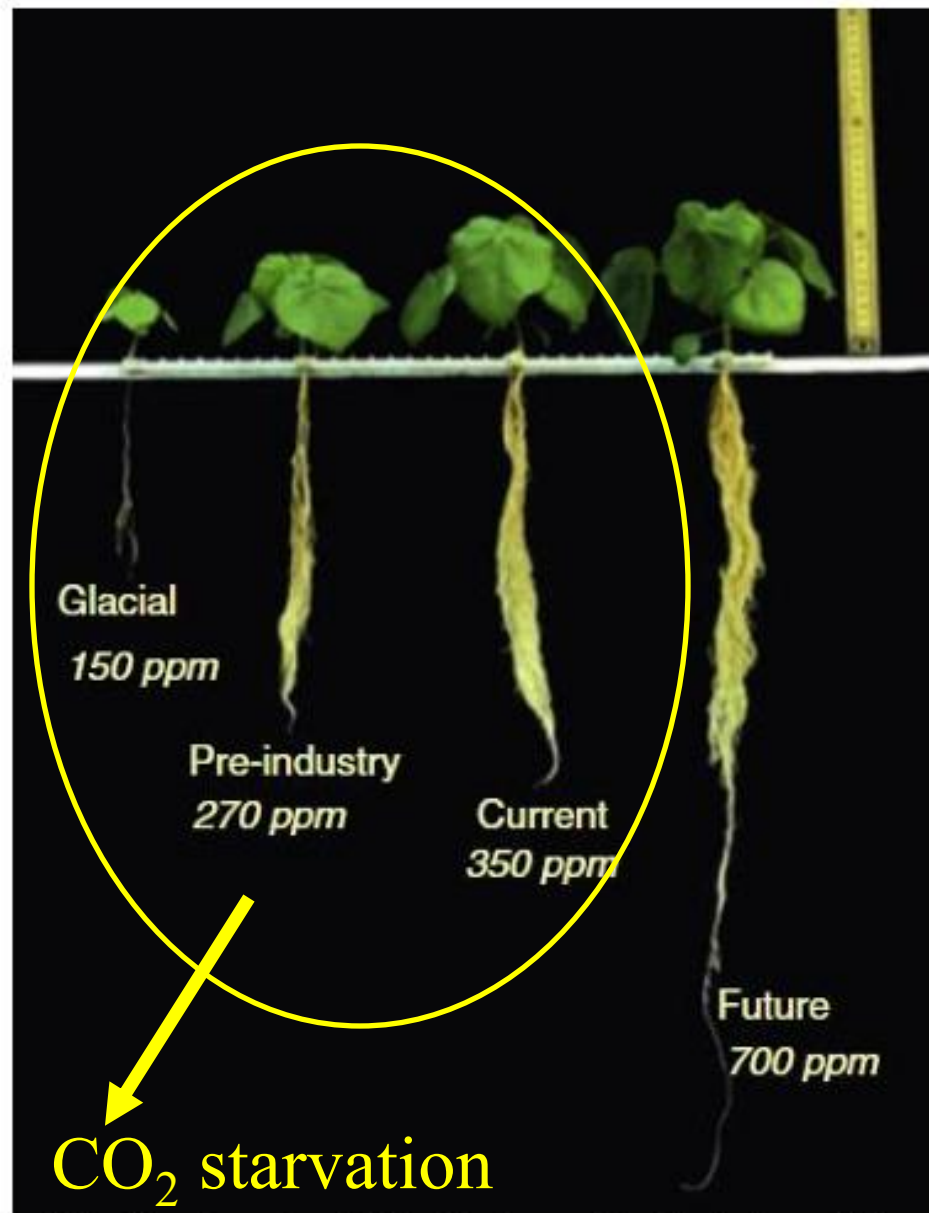


Figure 2.2: growth of *Abutilon theophrasti* after 14 days under identical conditions but for the indicated variations in CO₂ levels. Source: Gerhart and Ward (2010). Note "Current" corresponds to 1988 in image.

There is good news from rising atmospheric CO₂

Published: 11 April 2025

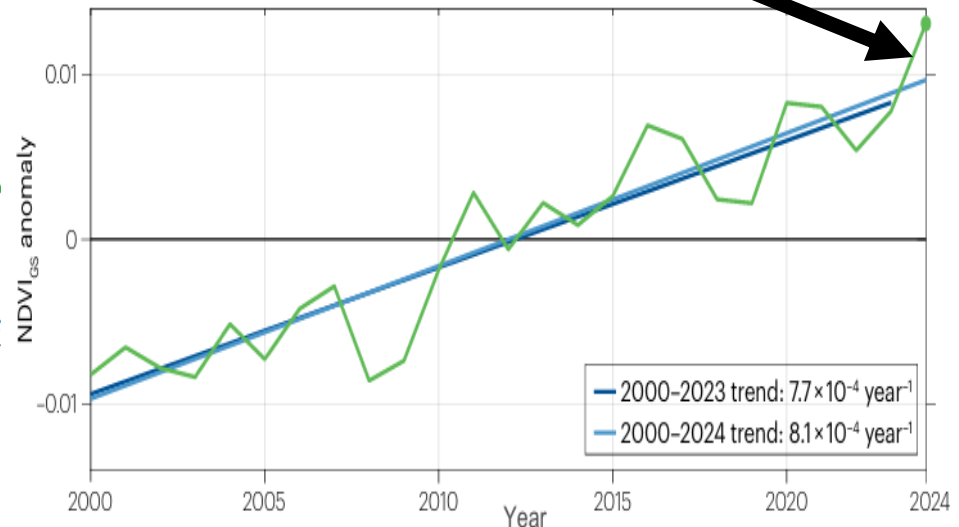
Year in review

Climate chronicles

Vegetation greenness in 2024

Yanchen Gui, Kai Wang, Chris Huntingford, Shankai Wei, Xiangyi Li, Ranga B. Myneni & Shilong Piao

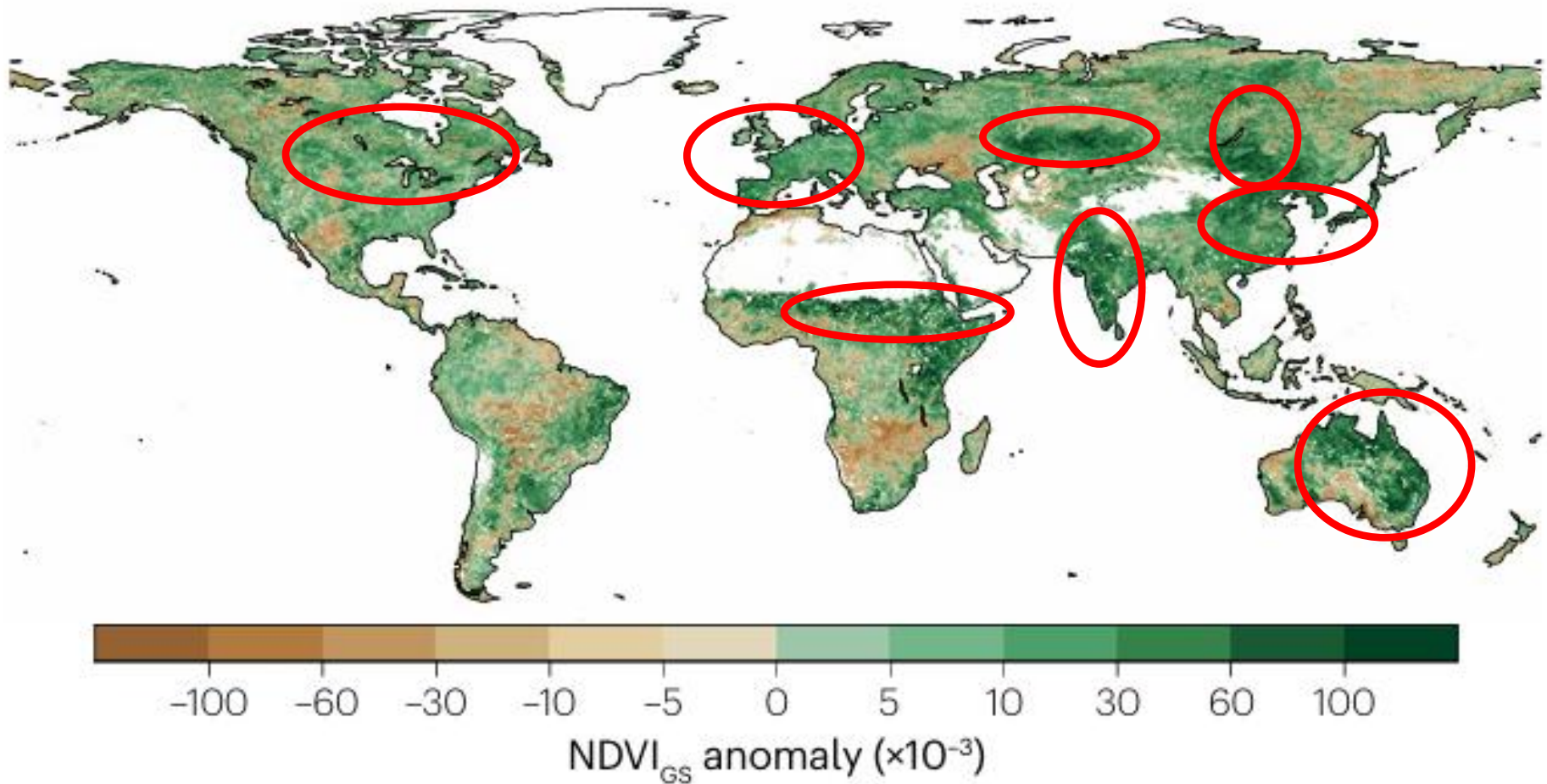
a Global mean NDVI_{GS}



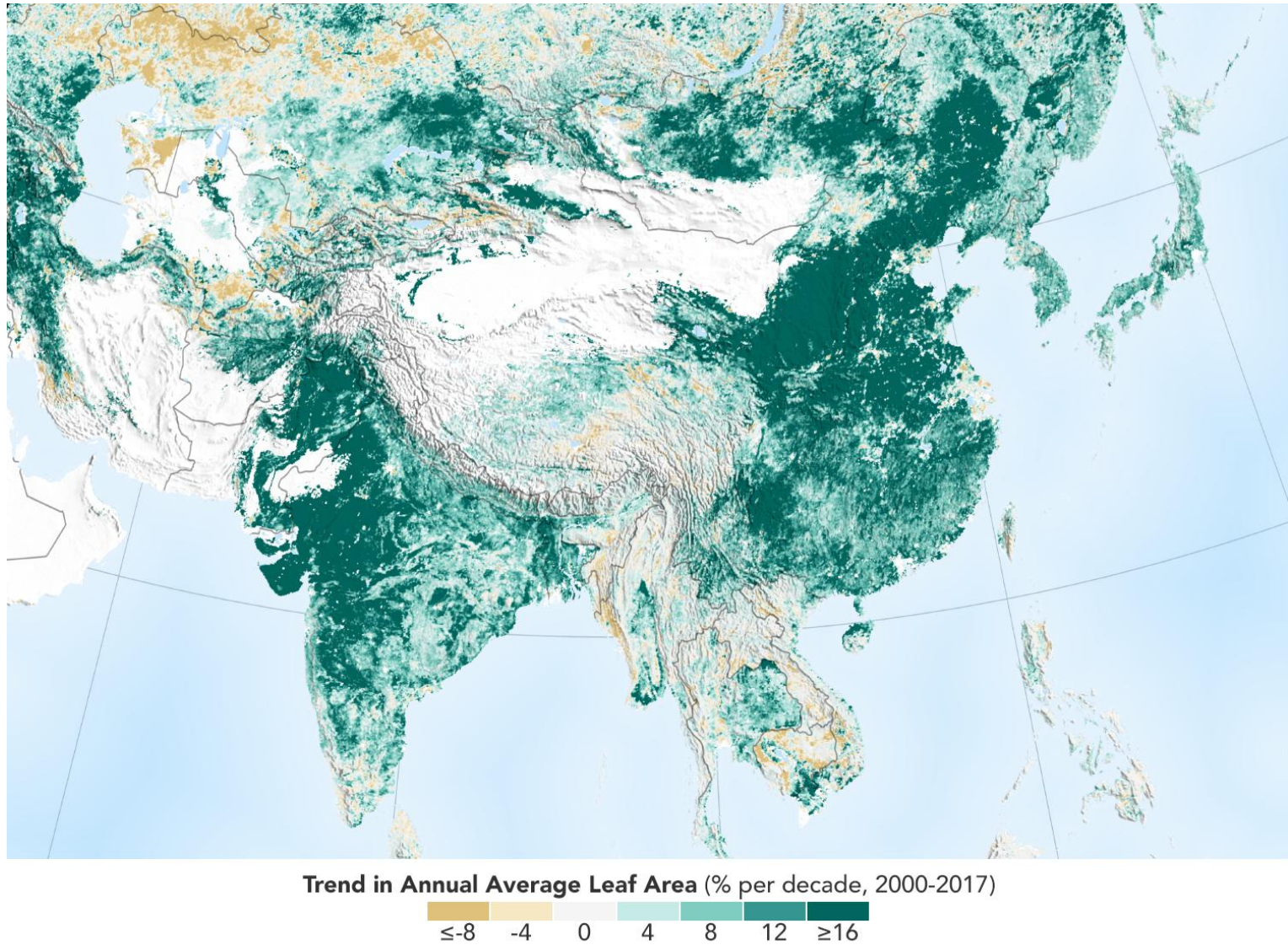
2024 witnessed record-high global vegetation greenness, far outpacing the previous high set in 2020. A total of 67.7% of vegetated land surfaces experienced greening, notably in Eurasian and tropical grasslands, and global croplands.

There is good news from rising atmospheric CO₂

C 2024 anomalies relative to 2000–2024



CO₂ and Greener Planet: China + India



Source: NASA (February 11, 2019) <https://www.nasa.gov/feature/ames/human-activity-in-china-and-india-dominates-the-greening-of-earth-nasa-study-shows>

CO₂ and Greener Planet

ARTICLE

DOI: 10.1038/s41467-017-00114-5

OPEN

Recent increases in terrestrial carbon uptake at little cost to the water cycle

Lei Cheng¹, Lu Zhang¹, Ying-Ping Wang², Josep G. Canadell³, Francis H.S. Chiew¹, Jason Beringer⁴, Longhui Li⁵, Diego G. Miralles⁶, Shilong Piao^{7,8,9} & Yongqiang Zhang¹

Rising carbon dioxide is making the world's plants more water-wise

July 24, 2017 5:18am EDT

Tropical rainforests are among the biggest contributors to the global greening boom. AAP Image/Dave Hunt

Email

Twitter

Facebook

LinkedIn

290

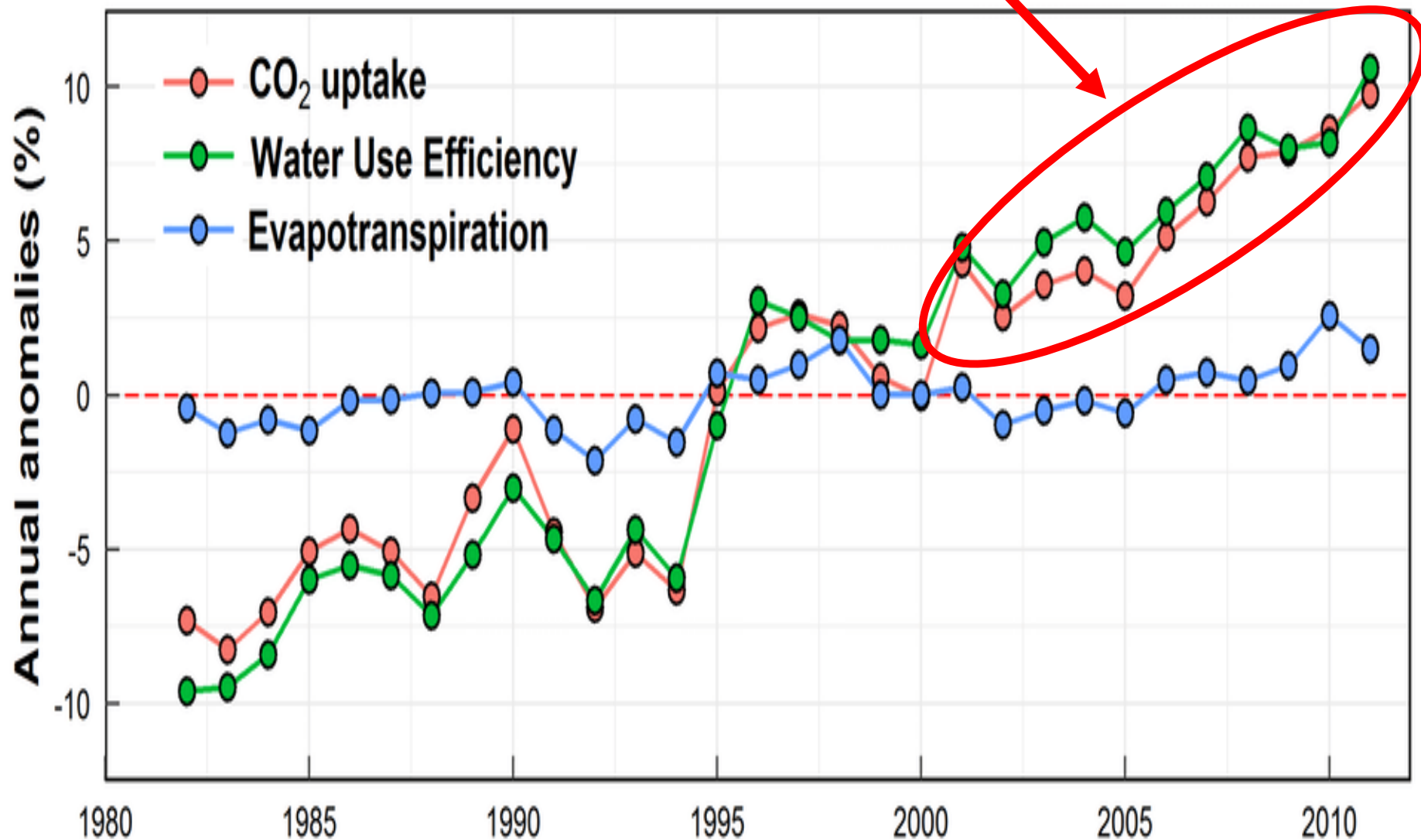
1.8k

58

Land plants are absorbing 17% more carbon dioxide from the atmosphere now than 30 years ago, our [research published today](#) shows. Equally extraordinarily, our study also shows that the vegetation is hardly using any extra water to do it, suggesting that global change is causing the world's plants to grow in a more water-efficient way.

CO₂ and Greener Planet

More CO₂ sucked up by the biosphere and better water use efficiency



CO₂ and Greener Planet: China's Loess Plateau



The Haters of Greener Planet's Latest Campaign



Rising CO₂ Causing Starvations?

September 2025 update

RECORD U.S. CORN CROP LOOM! BUT EXPORT STRENGTH OFFERS PRICE SUPPORT

September 22, 2025 By Jared White Filed Under: Crops, Exports, Market News, News



Record canola harvest reinforces SA's status as net exporter

Infestation challenges and rising input costs did not stop the crop from reaching new production high

BL PREMIUM

27 AUGUST 2025 - 18:25

UPDATED 28 AUGUST 2025 - 11:24

by JANA MARX ECONOMICS CORRESPONDENT

SA's canola crop for 2025/26 will be a record high, reinforcing the country's status as a net exporter of the oilseed.

Record EU soft wheat harvest expected this year

By Reuters

Reading Time: 2 minutes

Published: September 11, 2025

Crop Management, Markets, reuters



Reuters

World ▾ Business ▾ Markets ▾ Sustainability ▾ Legal ▾ Commentary ▾ Technology ▾ Investigations ▾ More ▾ M

India's rice stocks hit record, wheat at four-year high

By Rajendra Jadhav

September 17, 2025 9:07 AM CDT · Updated September 17, 2025





“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.”

~RICHARD LINDZEN



Andrew McCarthy (Sep. 18, 2025) <https://x.com/AJamesMcCarthy/status/1968659105024790640>