

A photograph of a nuclear power plant at night. The sky is dark blue with several bright lightning bolts striking down. In the foreground, there are several large, white, cylindrical cooling towers illuminated from below. To the right, there is a tall, thin smokestack with red lights at the top. The overall scene is dramatic and somewhat ominous.

Climate & Energy Disinformation

Ralph Ellis

Modulation of Ice Ages

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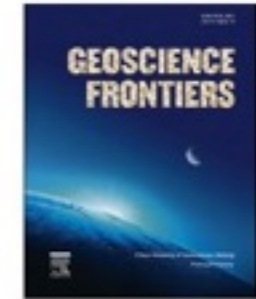
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Research paper

Modulation of ice ages via precession and dust-albedo feedbacks



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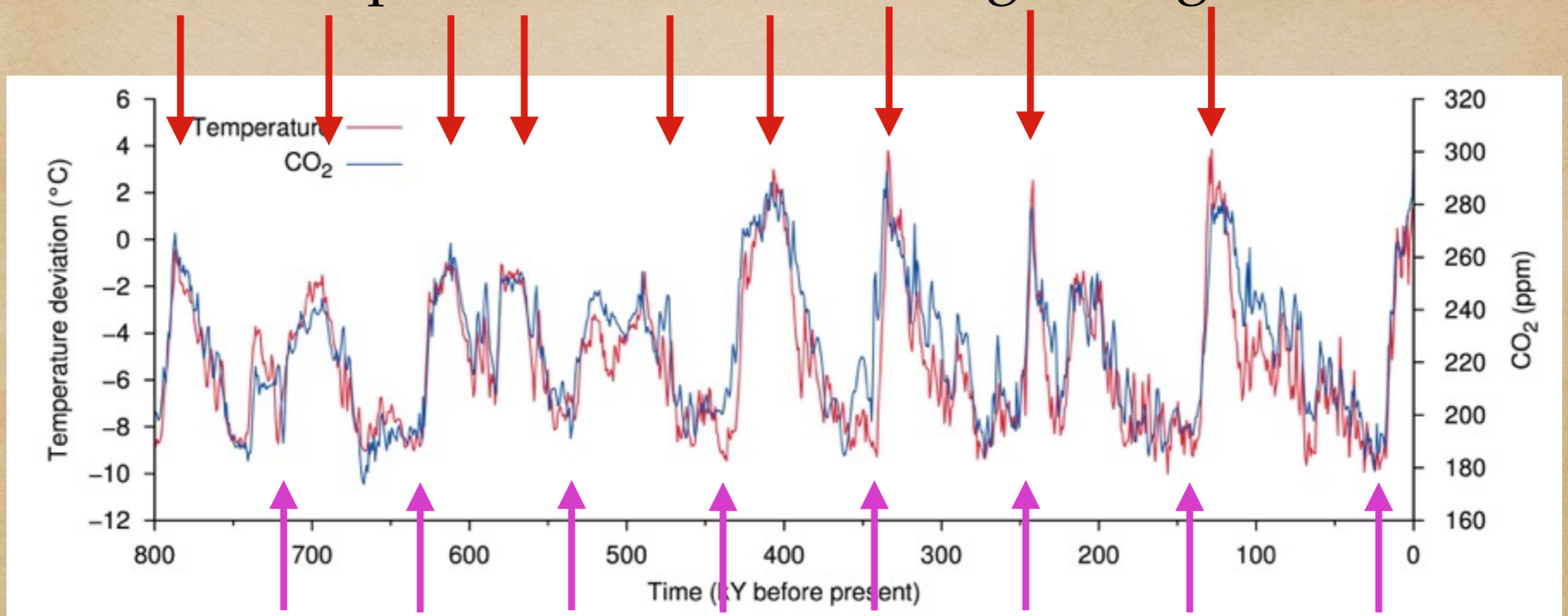
CO₂

ABSTRACT

We present here a simple and novel proposal for the modulation and rhythm of ice-ages and interglacials during the late Pleistocene. While the standard Milankovitch-precession theory fails to explain the long intervals between interglacials, these can be accounted for by a novel forcing and feedback system involving CO₂, dust and albedo. During the glacial period, the high albedo of the northern ice sheets drives down global temperatures and CO₂ concentrations, despite subsequent precessional forcing maxima. Over the following millennia more CO₂ is sequestered in the oceans and atmospheric concentrations eventually reach a critical minima of about 200 ppm, which combined with arid conditions, causes a die-back of temperate and boreal forests and grasslands, especially at high altitude. The ensuing soil erosion generates dust storms, resulting in increased dust deposition and lower albedo on the northern ice sheets. As northern hemisphere insolation increases during the next Milankovitch cycle, the dust-laden ice-sheets absorb considerably more insolation and undergo rapid melting, which forces the

Ralph Ellis

Temperature vs CO2 during Ice Ages



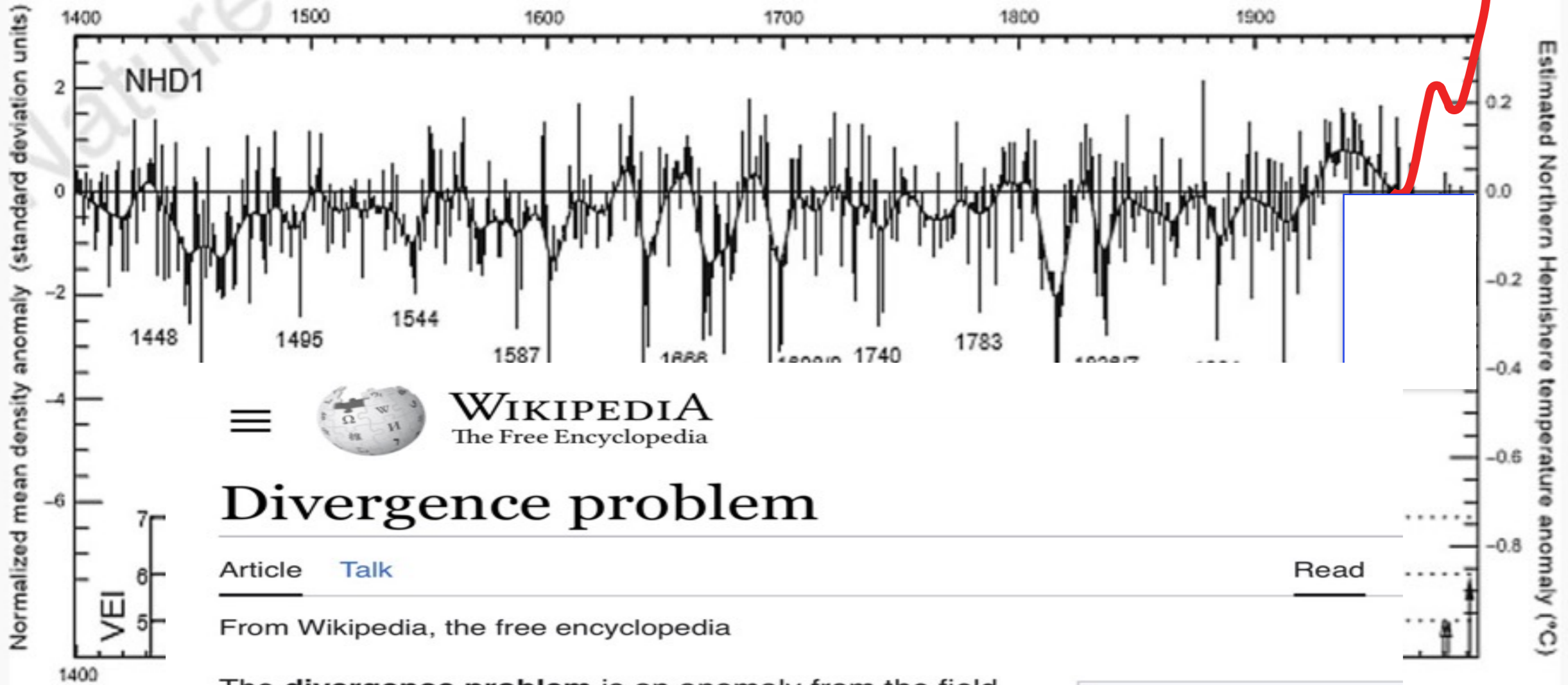
Correlation does not imply Causation

High CO2 'causes' cooling

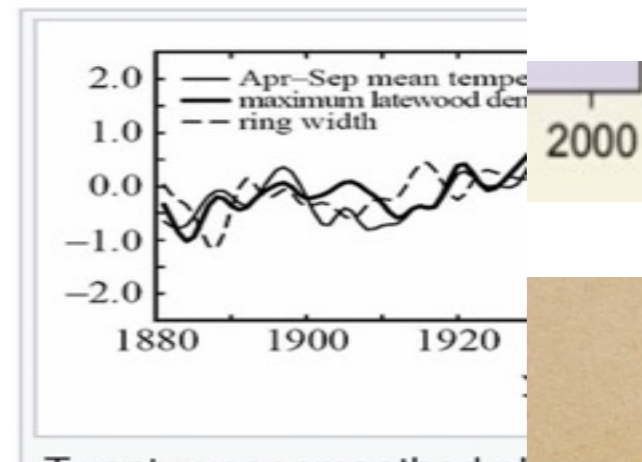
Low CO2 'causes' warming

Would not happen if CO2 was strong greenhouse gas

Hiding the Decline



The **divergence problem** is an anomaly from the field of [dendroclimatology](#), the study of past climate through observations of old trees, primarily the properties of their annual growth rings. It is the disagreement between [instrumental temperatures](#) (measured by [thermometers](#)) and the temperatures reconstructed from latewood densities or, in some cases, from the widths of tree rings in [far northern forests](#).

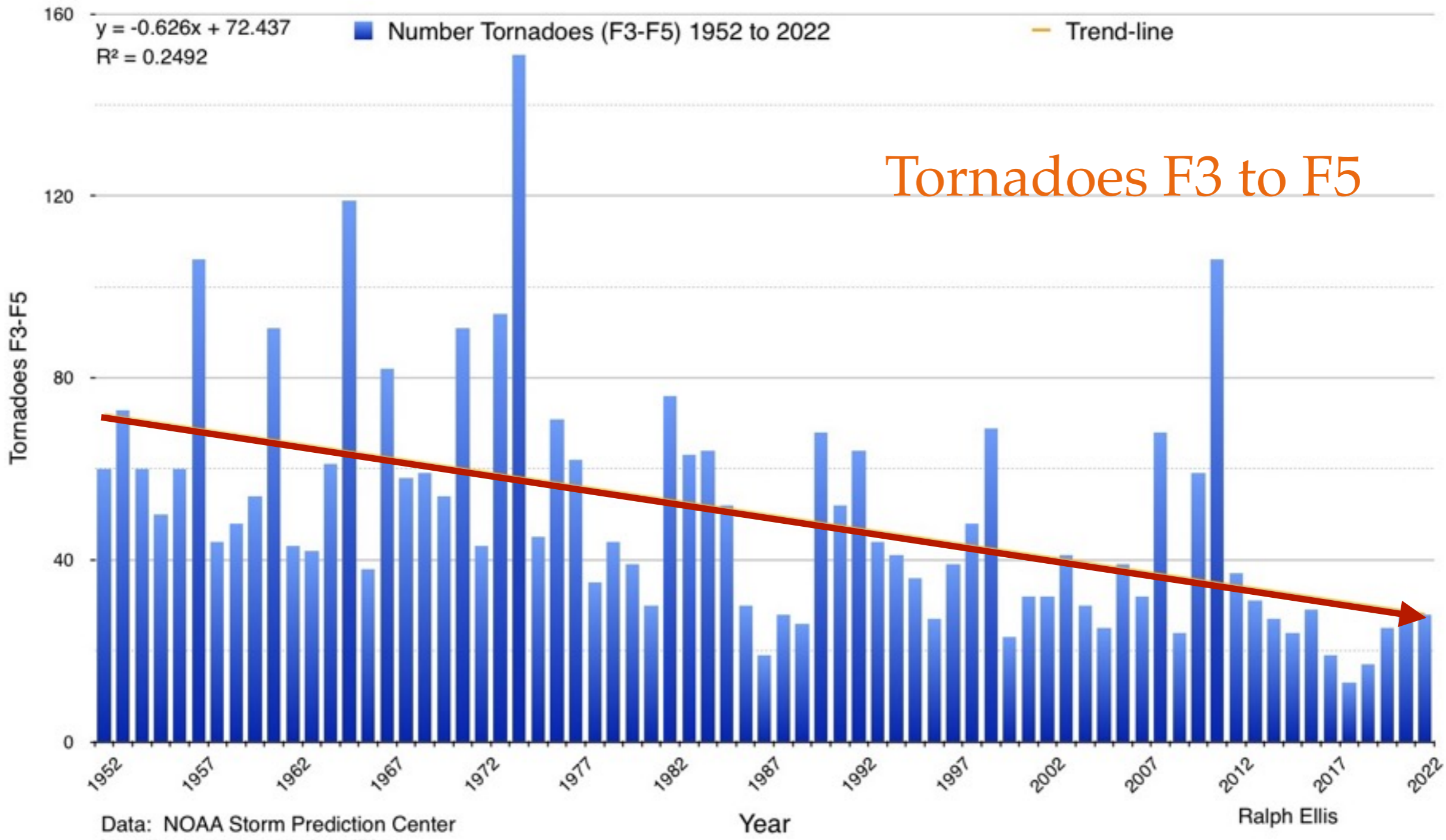


BBC Weather Maps



Images from BBC

USA Tornado Numbers

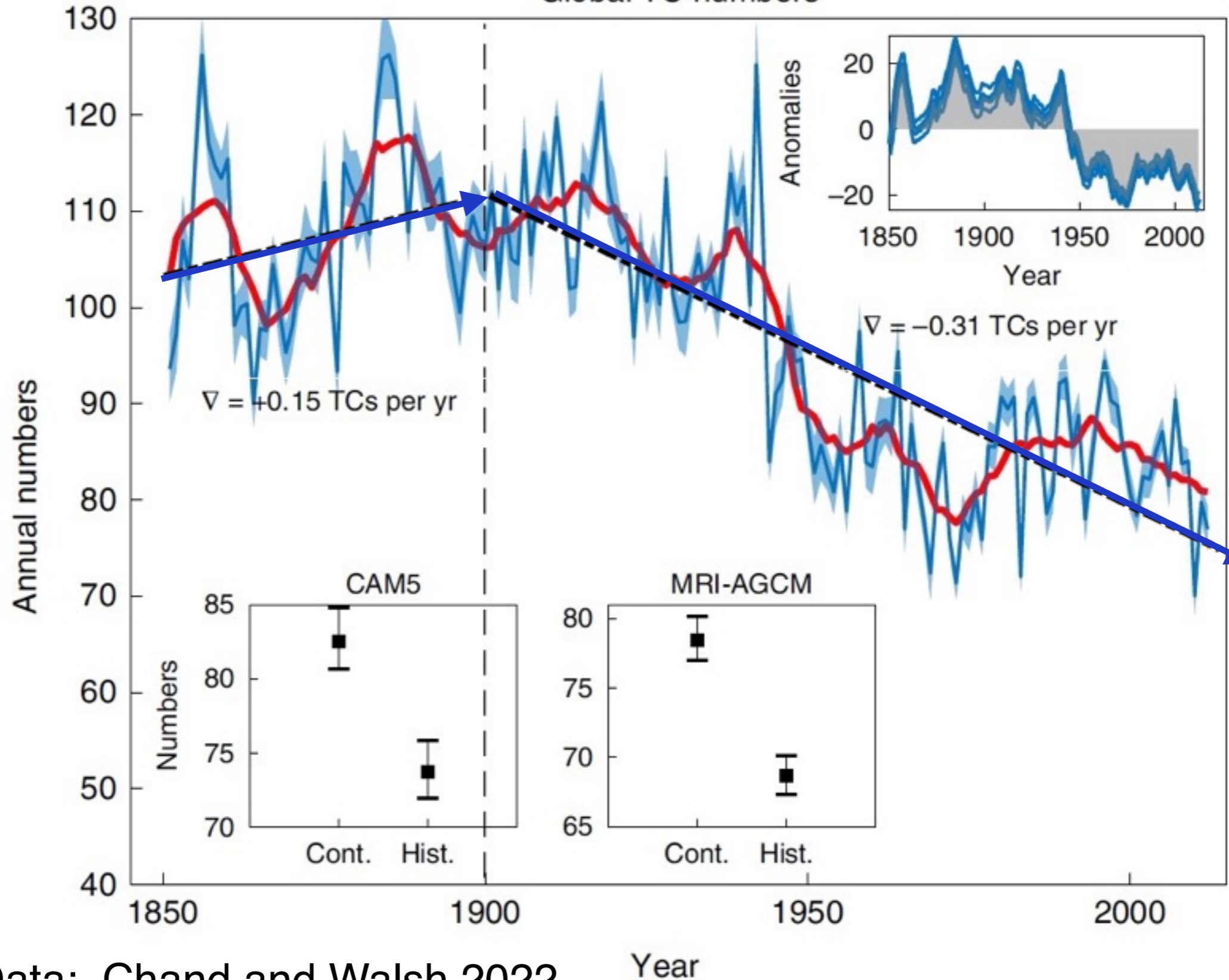


Tornadoes F3 to F5

Data: NOAA Storm Prediction Center
<https://www.spc.noaa.gov/wcm/#data>

a

Global TC numbers

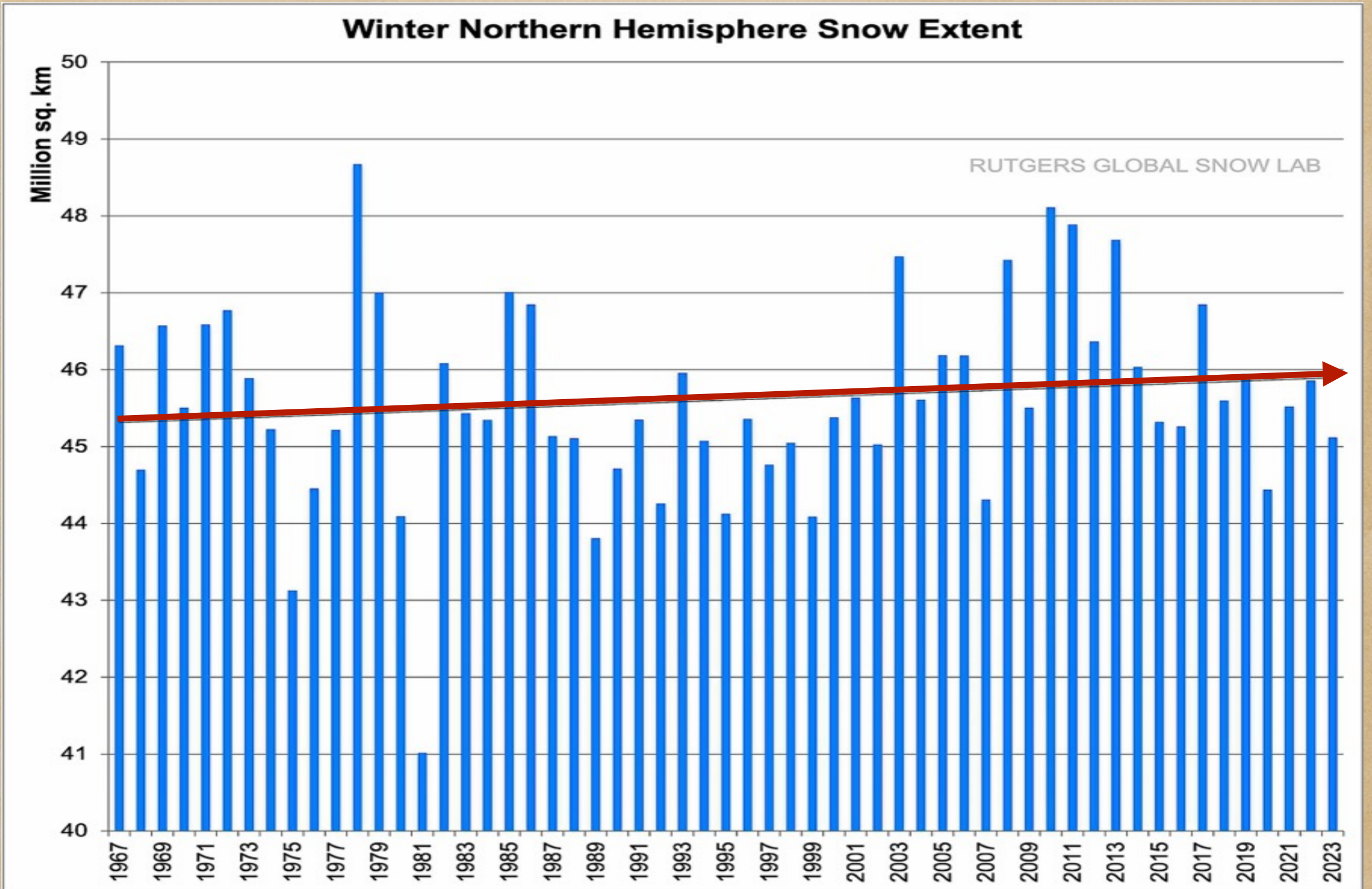


Data: Chand and Walsh 2022

laue
2022

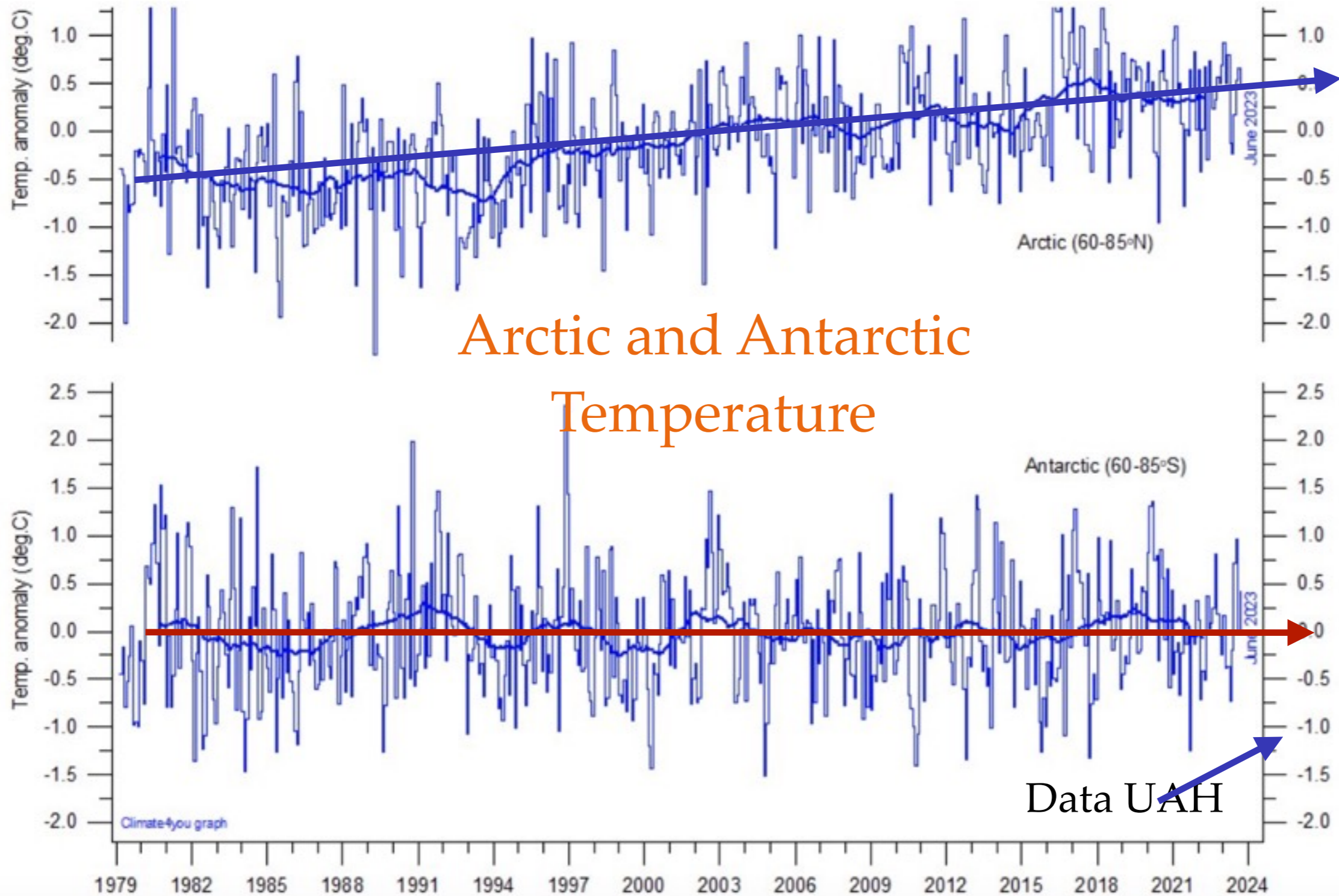
22

Northern Hemisphere Snow Extent



Data: Rutgers Snow Lab

Polar Temperature and Ice Sheets



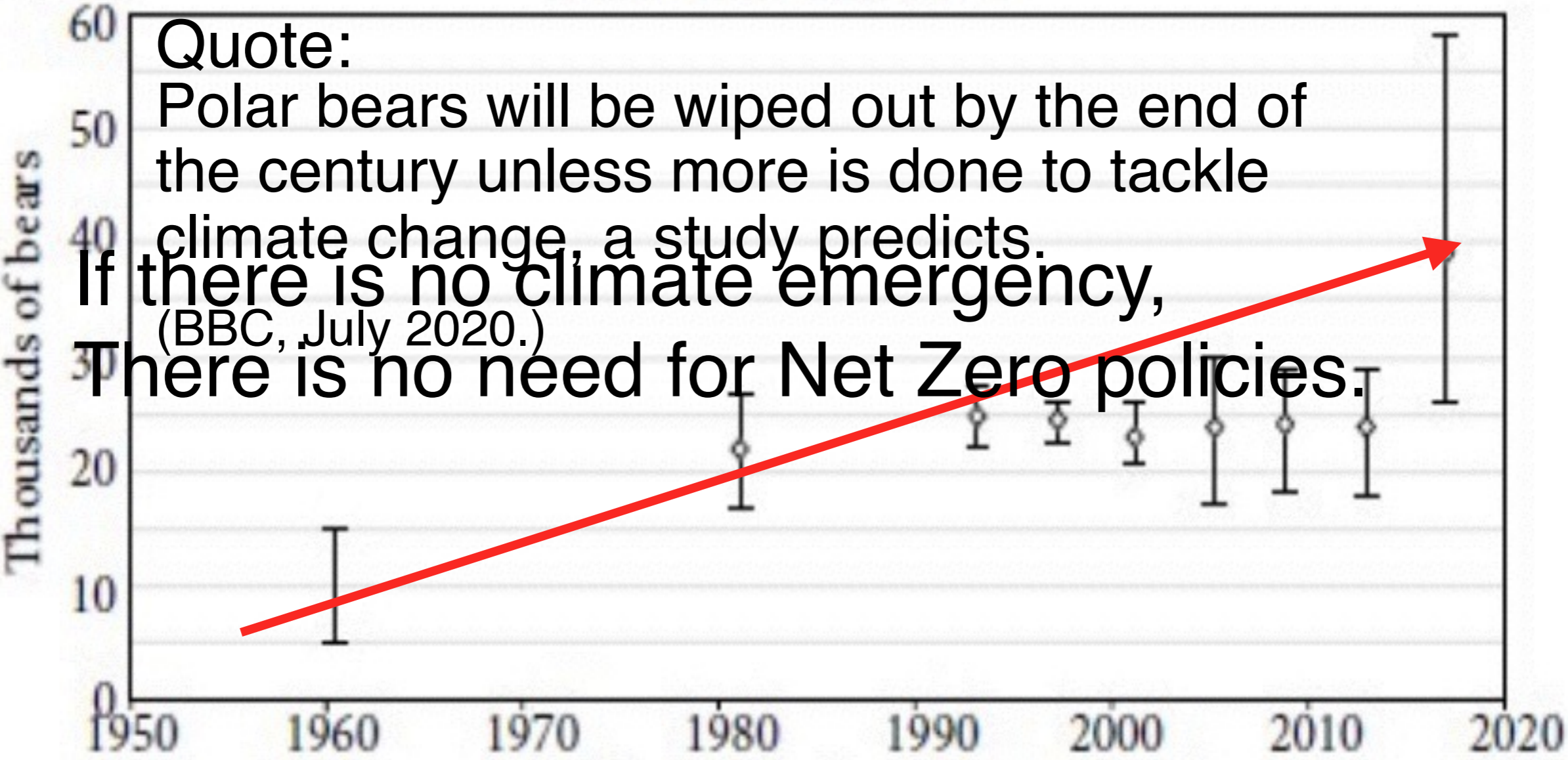
Arctic and Antarctic Temperature

Forest Soot and Industrial Dust on Arctic Ice



Images: Dark Snow Project 2012

Polar Bear Numbers



Quote:
Polar bears will be wiped out by the end of the century unless more is done to tackle climate change, a study predicts.
If there is no climate emergency,
(BBC, July 2020.)
There is no need for Net Zero policies.

97% Of Climate Scientists Agree With AGW

Quantifying the Consensus on Anthropogenic Global Warming
in the Scientific Literature, by John Cook *et al* (2013)

11,944 climate papers surveyed

66.4% (7,930) expressed no opinion

3% (118) of papers with an opinion, **rejected GW**

Therefore **97%** of papers with an opinion, **supported GW**

Actually, it was 24% (2,910) of papers supported GW

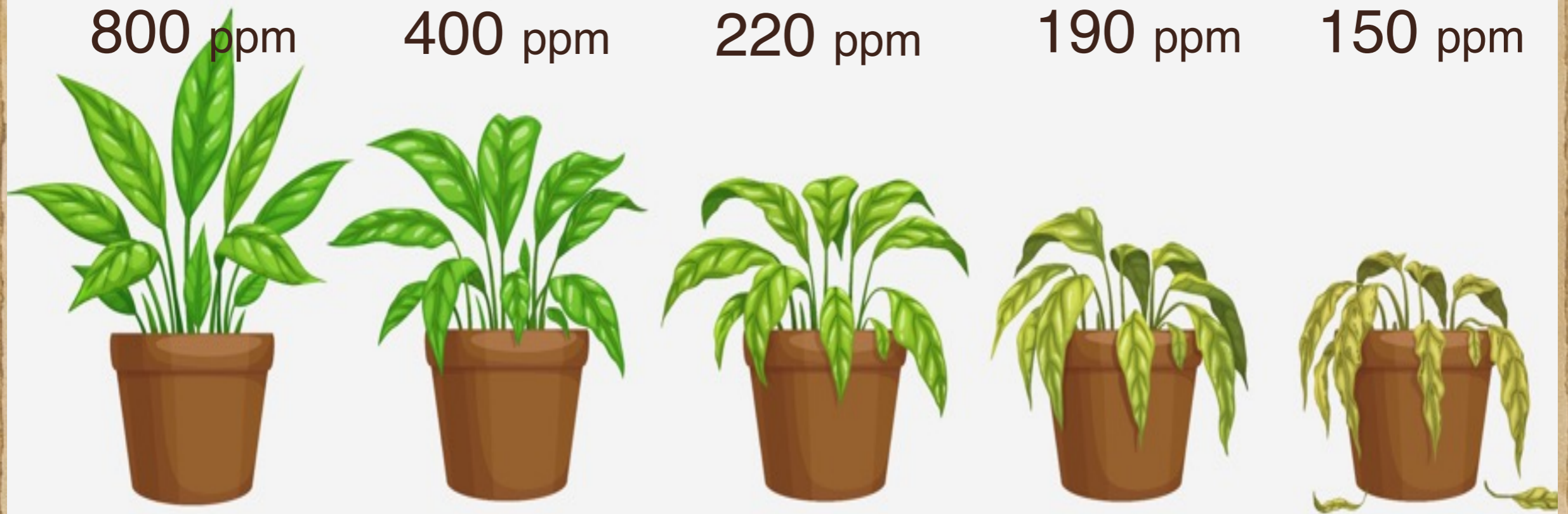
Only 8% (986) implicitly endorsed AGW

Only **0.5%** (64) of papers explicitly supported IPCC AGW

All climate scientists are paid to agree with AGW

Bellamy, Ridd, Ball, Curry, Svenmark...

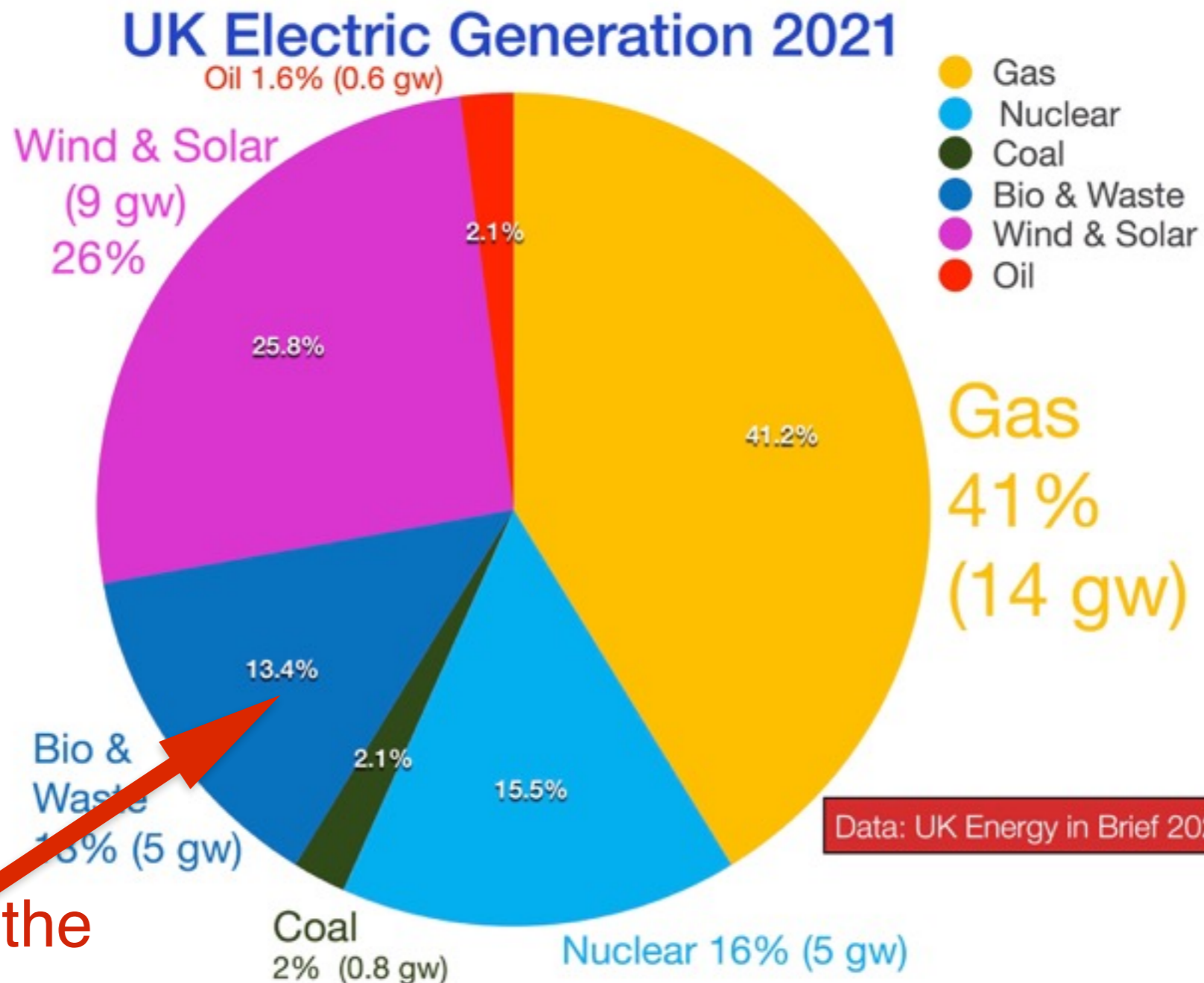
CO₂, the Most Essential Gas in the Atmosphere



Low CO₂ = Plant death
= CO₂ Deserts

Jurassic Era = 2,500 ppm CO₂
= 6x More than now

UK Electrical Generation by Type



**Drax the
Destroyer**

Renewables 39% - Hooray...!

UK fossil fuels only 1/40th of China

China Electrical Generation by Type

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Support us →

The Guardian
Newspaper of the year

News

Opinion

Sport

Culture

Lifestyle



Environment ▶ Climate crisis Wildlife **Energy** Pollution

China

Mon 27 Feb 2023

China approves biggest expansion in new coal power plants since 2015, report finds

Concerns about energy shortages drive increase as projects progress at 'extraordinary' speed

64.3%

Data: US E.I.A.
US Energy Information Admin

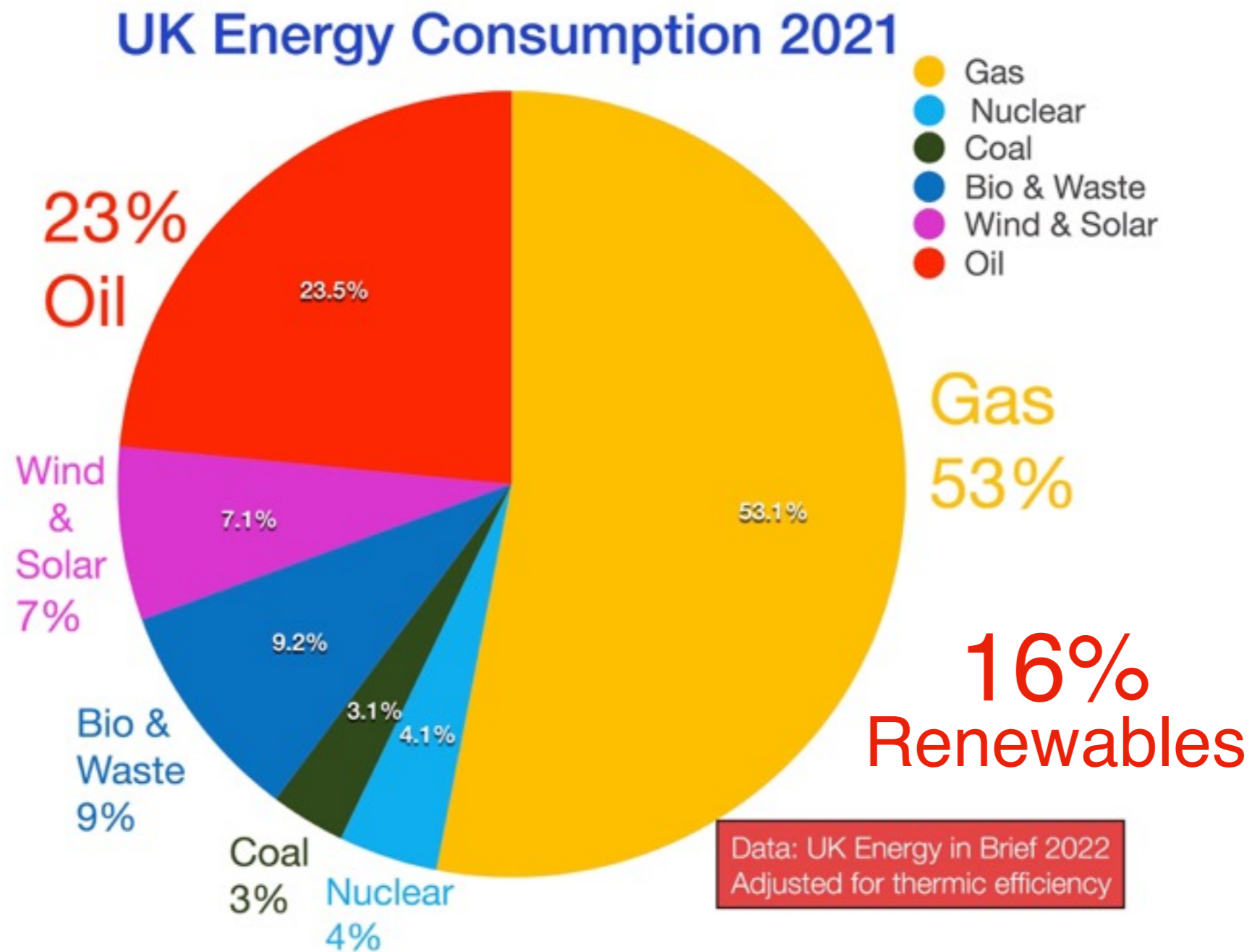
UK 16 gw (ff)

China 615 gw (ff)

China building 50 gw of coal in 2022

Data: US Energy Information Administration (EIA).

UK Energy Consumption by Type



Power generation needs to increase by 400%
Where are these new power stations being built?

Data: Dept Business, Energy and Industrial Strategy. UK Energy in Brief 2022, Adjusted for thermic efficiency.

UK Energy Backup Storage Requirements

6-day wind outage, and no solar

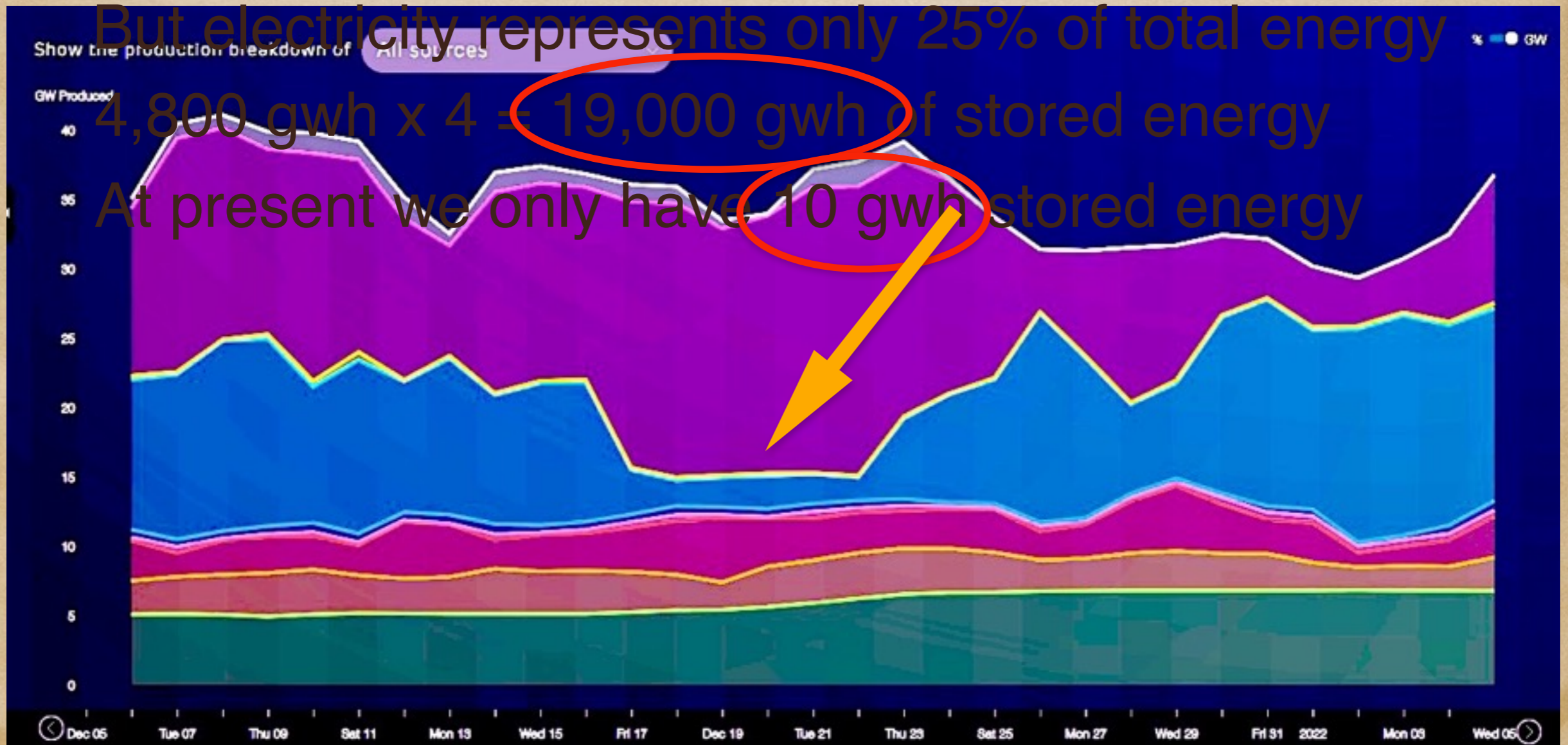
10-days of stored backup required

Backup half of UK grid for 10 days = 4,800 gwh 2021

But electricity represents only 25% of total energy

$4,800 \text{ gwh} \times 4 = 19,000 \text{ gwh}$ of stored energy

At present we only have 10 gwh stored energy



Dinorwig Pumped Water Storage Facility

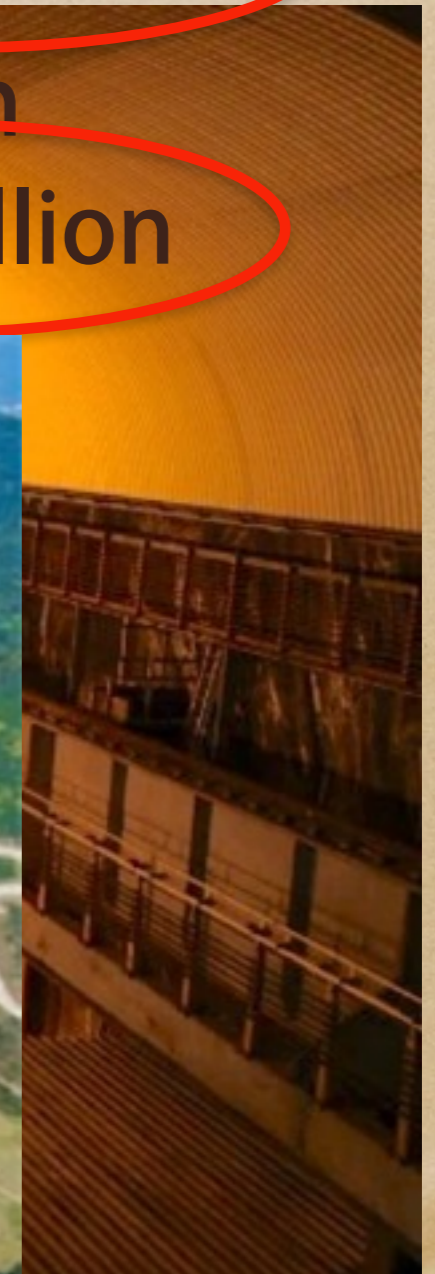
Require 600 Dinorwigs for backup (30 gwh ??)

Dinorwig now £ 1.7 billion

Total cost of storage facilities £ 1,000 billion

Coire Glas storage £ 1.6 billion, 30 gwh

Total cost of storage facilities £ 950 billion



Sustainable Energy Without Hot Air, Prof MacKay

The former government science advisor is not serious about Britain converting to electric generation using renewable energy, unless they address the energy storage problem.

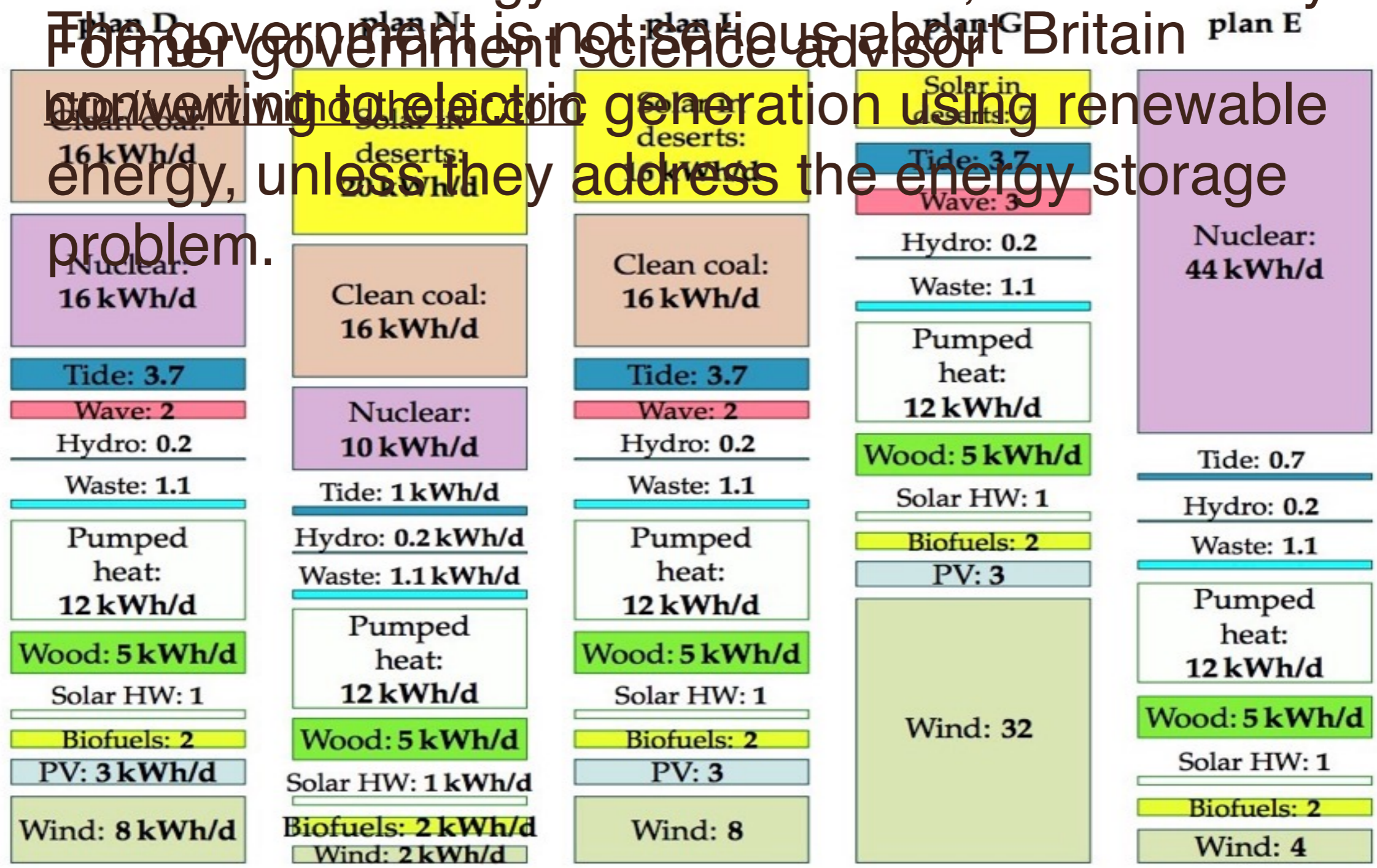


Figure 27.9.
 DAVID JG MACKAY

Energy Costings - for 60% power

Offshore Wind

100 Hornsea-3 Wind Farms (200 MW)	£ 850 bn	(35% capacity-f)
Renewal after 25 years	£ 850 bn	(50 yrs project)
600 pumped storage backup	£1,000 bn	
Total	£2,700 bn	

Denmark, Sweden, Germany, Japan

Solar in Sahara

3,900 Wroughton Airfields (60 mw)	£ 320 bn	
Renewal after 25 years	£ 320 bn	(50 yrs project)
Rent for 50 years	£1,500 bn	(over 50 yrs)
340 Suedlink cables (4gw)	£3,100 bn	(15% losses)
600 pumped storage backup	£1,000 bn	
Total	£6,240 bn	

China, Germany, Japan

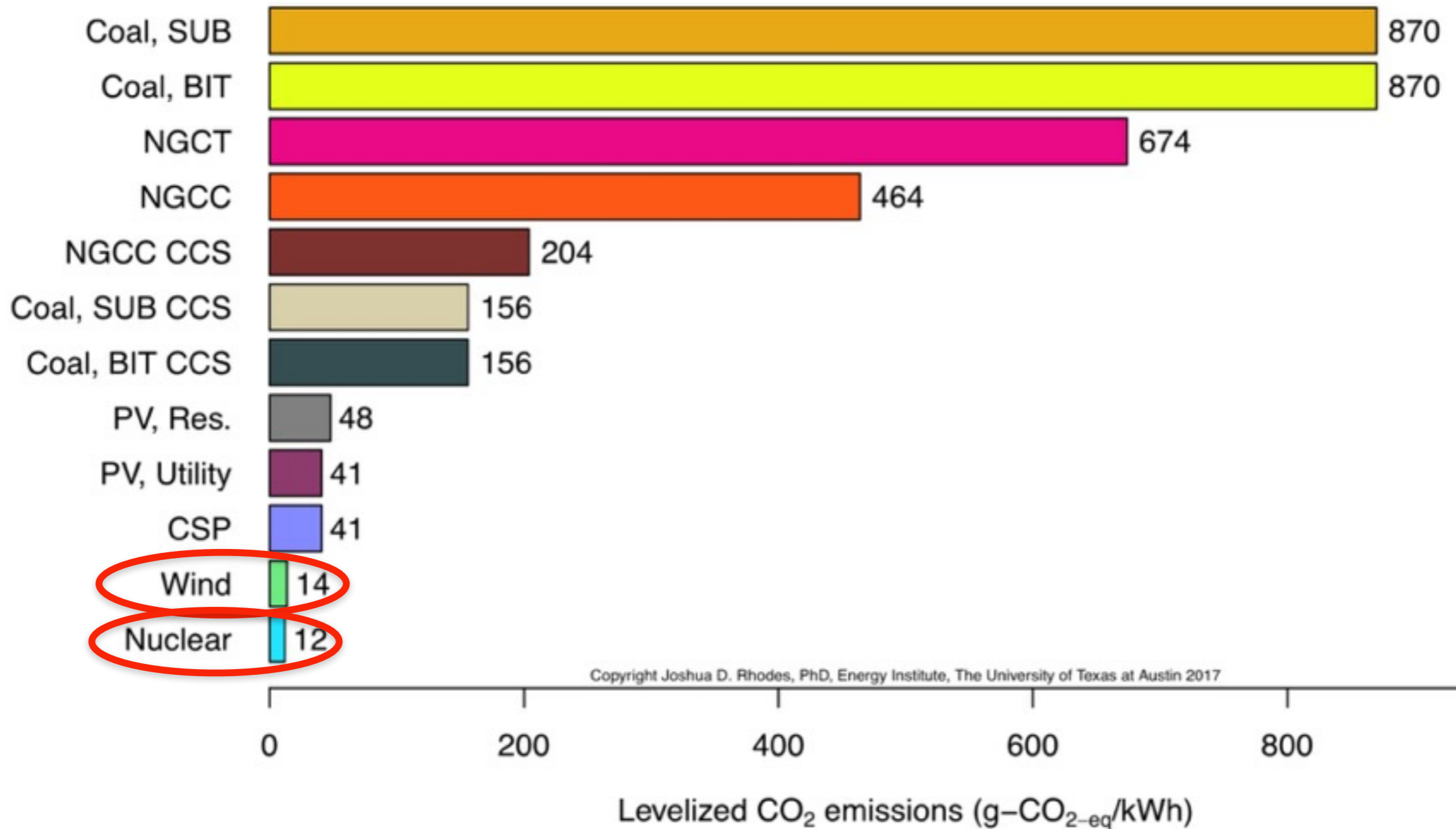
Nuclear Power

30 Hinkley Points (3.3 gw)	£ 600 bn	
Fuel (0.5 cents/kwh)	£ 220 bn	(over 50 yrs)
Total	£ 820 bn	

China, France

Energy - CO₂ and Safety

Estimated levelized CO_{2-eq} emissions



Nuclear Problems

Uranium Power



No long half-life waste products

Stable core that cannot melt-down (molten salt reactor)

Summary

1. CO2 most essential gas in atmosphere.
2. CO2 not a very powerful greenhouse gas.
3. Climate Change not as bad as advertised.
4. Most renewable energy needs **stored backup**.
5. Mandating electric vehicles and electric heating without generating capacity is utterly ridiculous.
6. However, alternative energy supplies ARE required, because we will run out of fossil fuels.
7. I think 60% nuclear power is required.
8. Uranium is a limited resource, like fossil fuels.
9. Thorium power is an alternative (but no investment).
10. The government is NOT SERIOUS about keeping lights on - maintaining our wealth and prosperity.

A photograph of a nuclear power plant at night. The sky is dark blue with several bright lightning bolts striking down. The power plant's cooling towers and other structures are illuminated from below, creating a stark contrast with the dark sky. The text "THE END" is overlaid in the center of the image.

THE END

Don't Panic

(Hitchhiker's Guide)

Effects of Climate and Weather

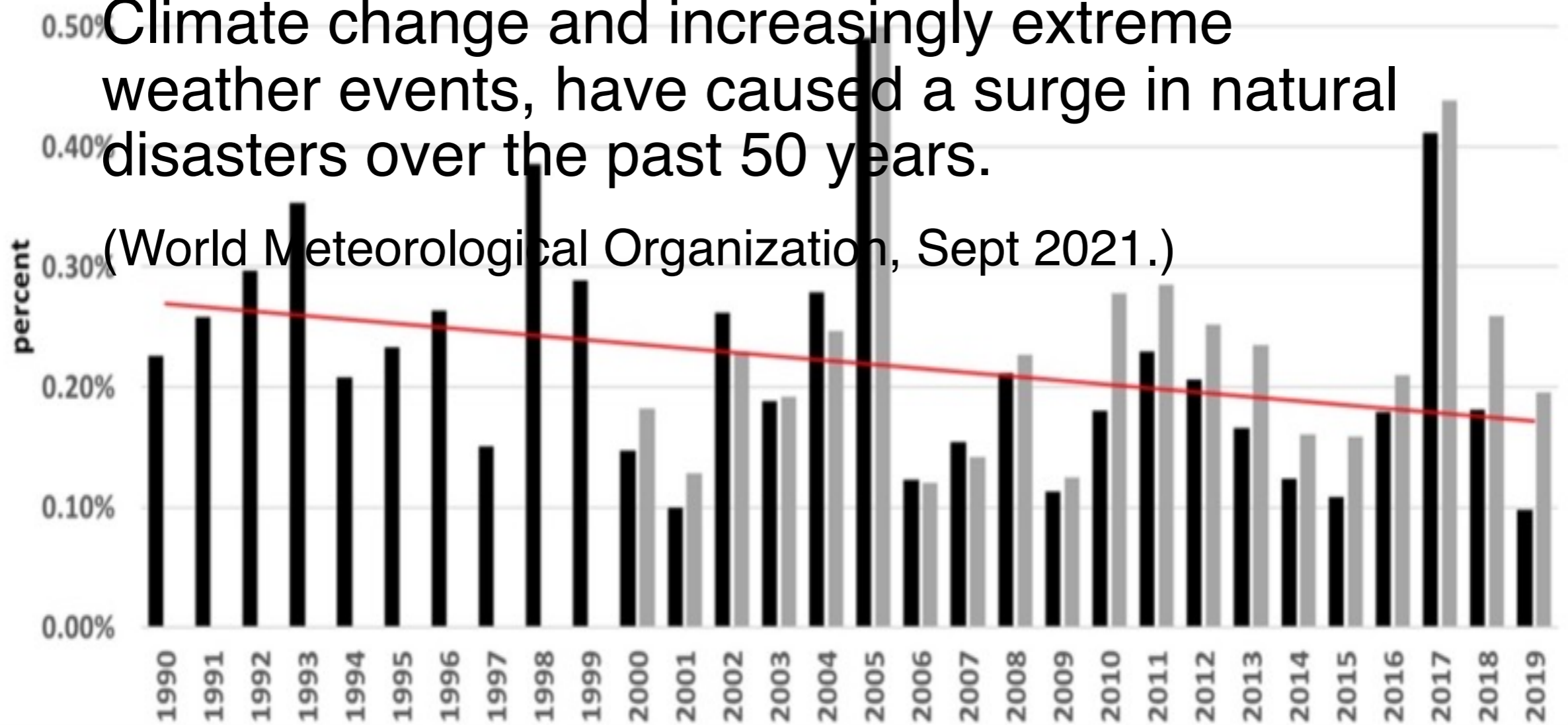
Source: Updated from Pielke (2019)
@Forbes
31 Oct 2019

Global Weather Losses as Percent of Global GDP: 1990-2019
(2019 losses are 1H annualized)

Quote:

Climate change and increasingly extreme weather events, have caused a surge in natural disasters over the past 50 years.

(World Meteorological Organization, Sept 2021.)



Data Pielke, R. (2019) Data Munich-Re Insurance