



**Serious Global Warming  
a real  
Climate Change  
252 mya**

**From  
Permian Glacial, Tundra  
Swamps & Forests  
to  
Triassic Desert**

**Part 1: Droughts, Fires & Floods**

**Part 2: Predictions, Projections & Panics**

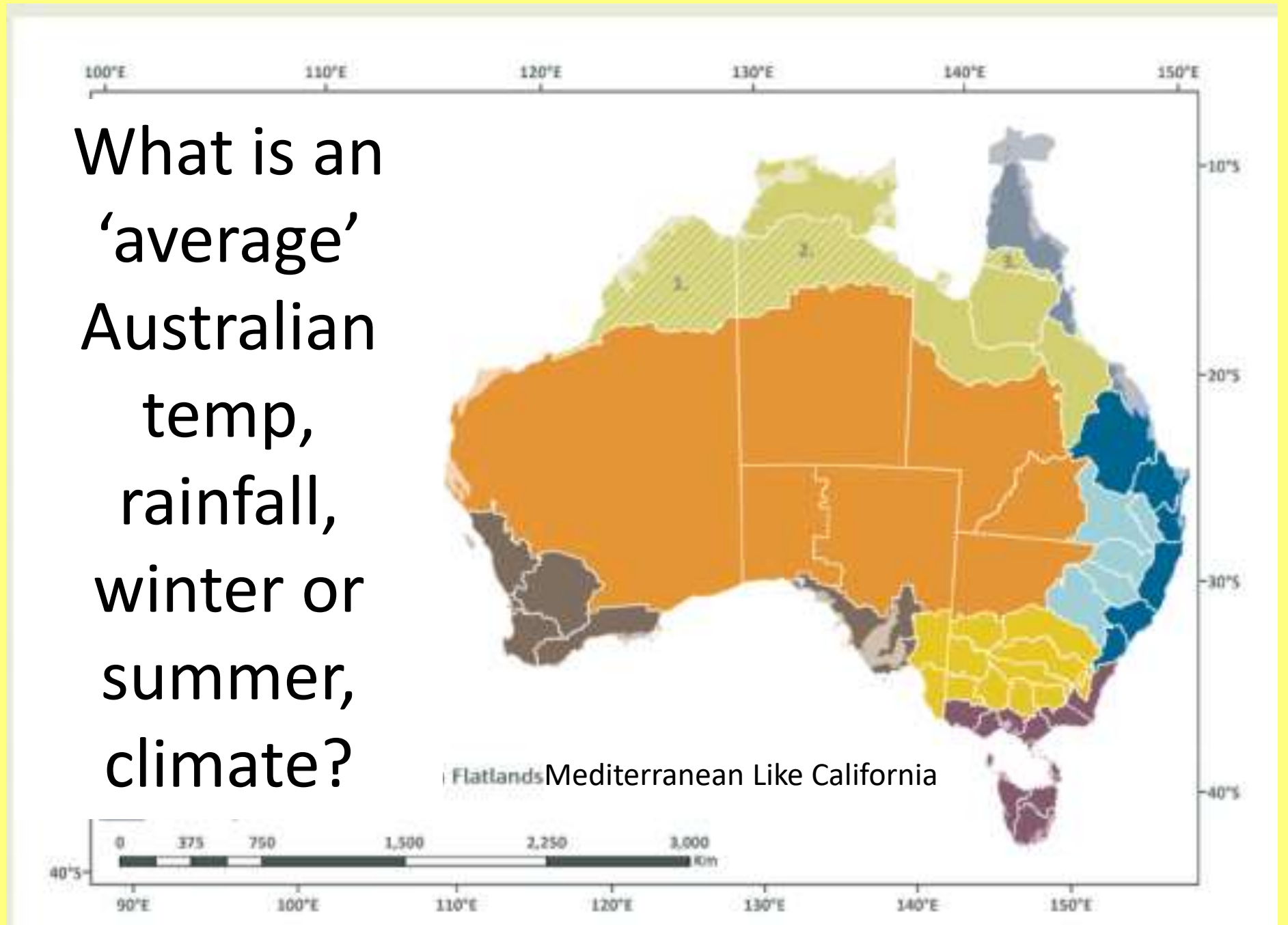
**Part 3: CO<sub>2</sub> & Temperature**

**Part 4: Where to next?**

Climate  
Change is a  
Result  
not a  
Cause

Climate is  
the average  
weather  
over >30  
years

What is an  
'average'  
Australian  
temp,  
rainfall,  
winter or  
summer,  
climate?



**Part 1:**

**Droughts**

**Fires**

**Floods**

# Wilcannia Temperature Data 1881-2014

## No evidence of a warming trend

Average 26.7°C



CO<sub>2</sub>

410

350

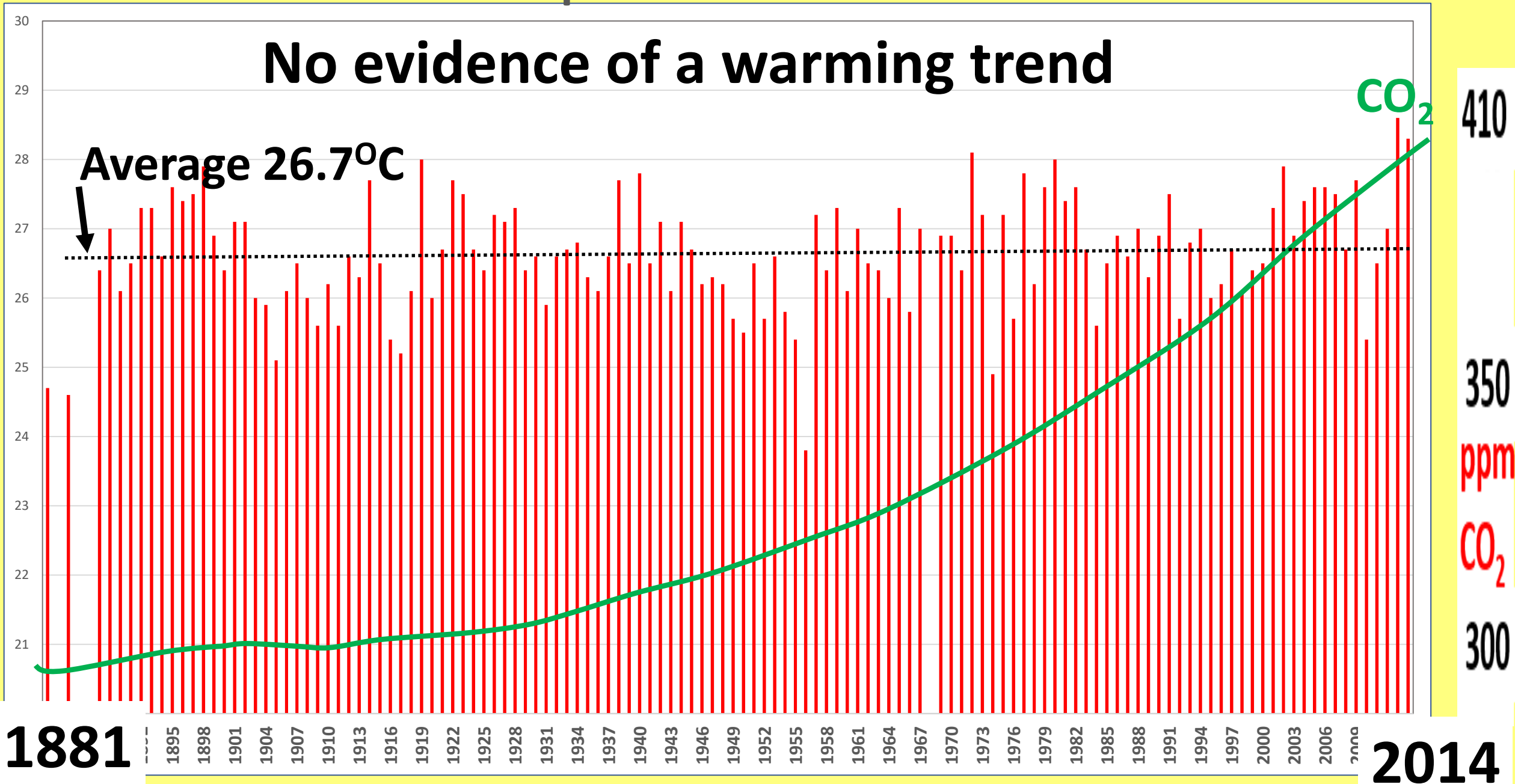
ppm

CO<sub>2</sub>

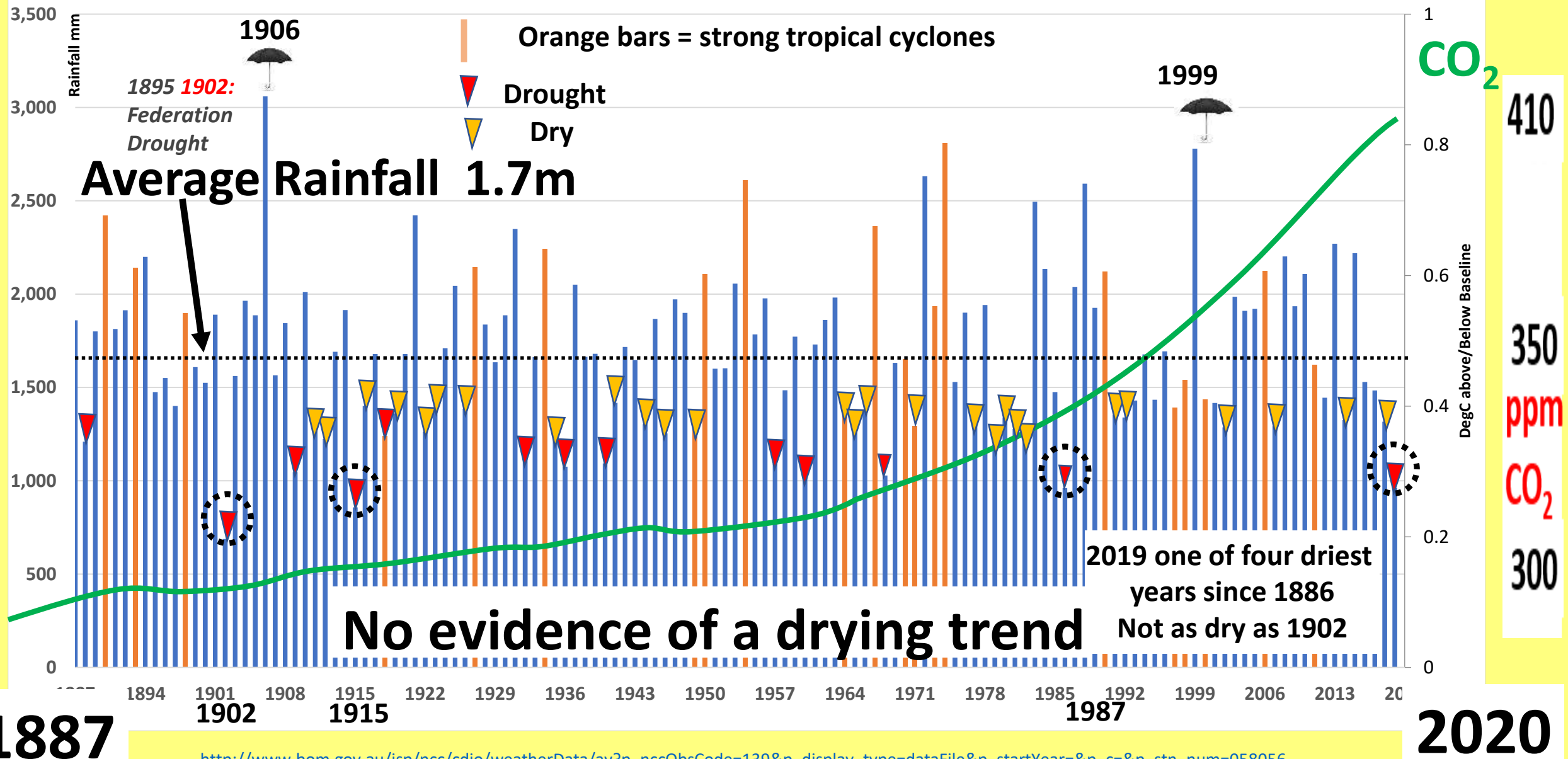
300

1881

2014



# Annual Rainfall Tweed Heads Golf Course 1887 - 2019



# Murray River 1915

Drought is not  
a New Normal



As Cook noted  
as he sailed by

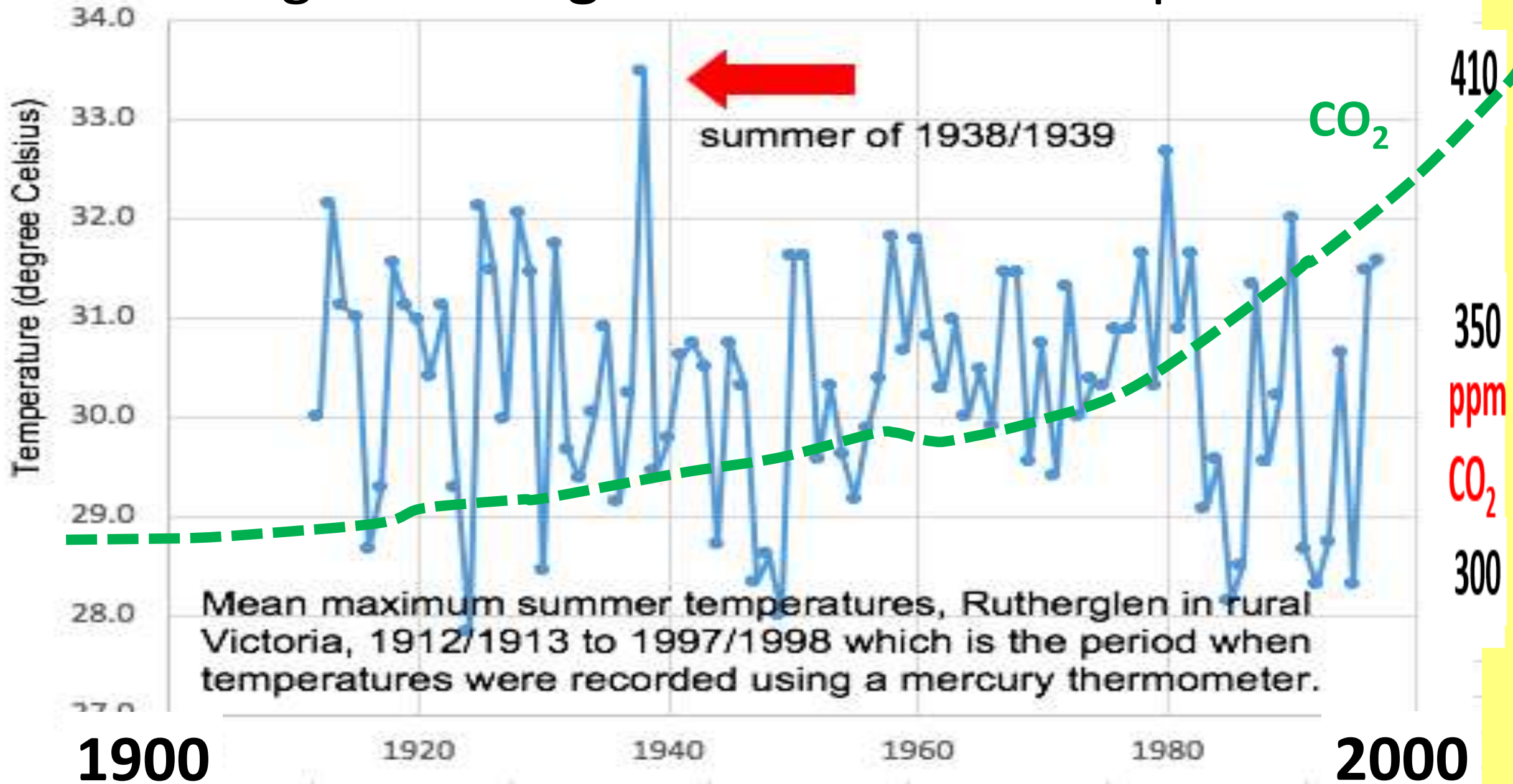
Drought and Fire are part of the natural Australian order

## Black Thursday - 1851



William Strutt: Black  
Thursday 1851

# Rutherglen Average Summer Time Temperatures



# 1939 Black Friday

TODAY, 13th JANUARY, 81 YEARS AGO WAS "BLACK FRIDAY"

"On that day it appeared that the whole State was alight."

3,700 buildings destroyed, 71 killed, 5 towns were completely destroyed - never to be rebuilt.

Eighty-one years ago (13th January 1939) temperatures above 110°F (45°C) and the state in drought, bushfires consumed 3,700 buildings, 71 lives were lost and 5 towns completely destroyed never to be rebuilt.



"The speed of the fires was appalling."



*"At midday, in many places, it was dark as night".*



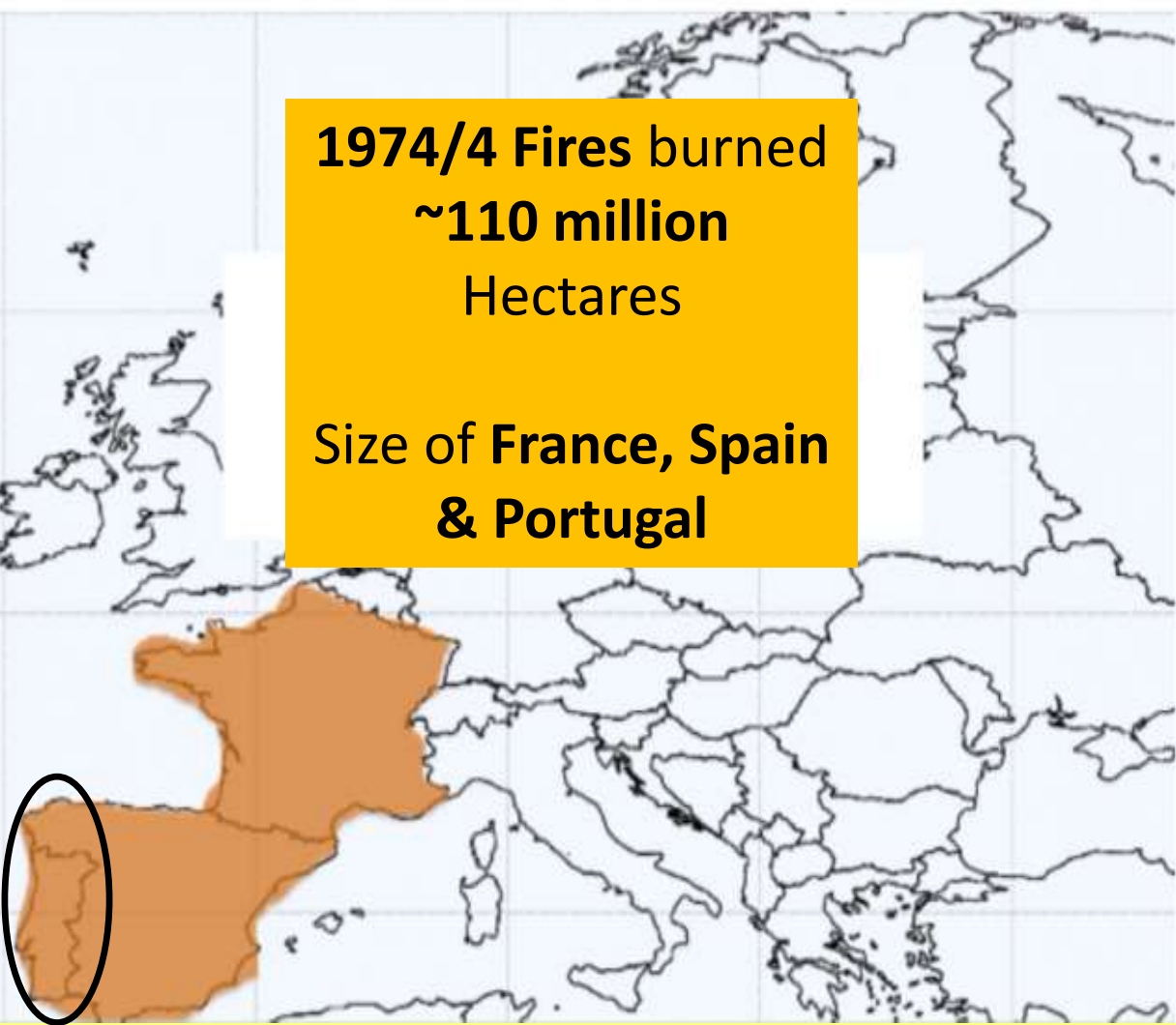
*"lighting the forests 6 or 7 miles in advance of the main fires"*

# Australia's "Worst" Bushfires

**1974/1975**

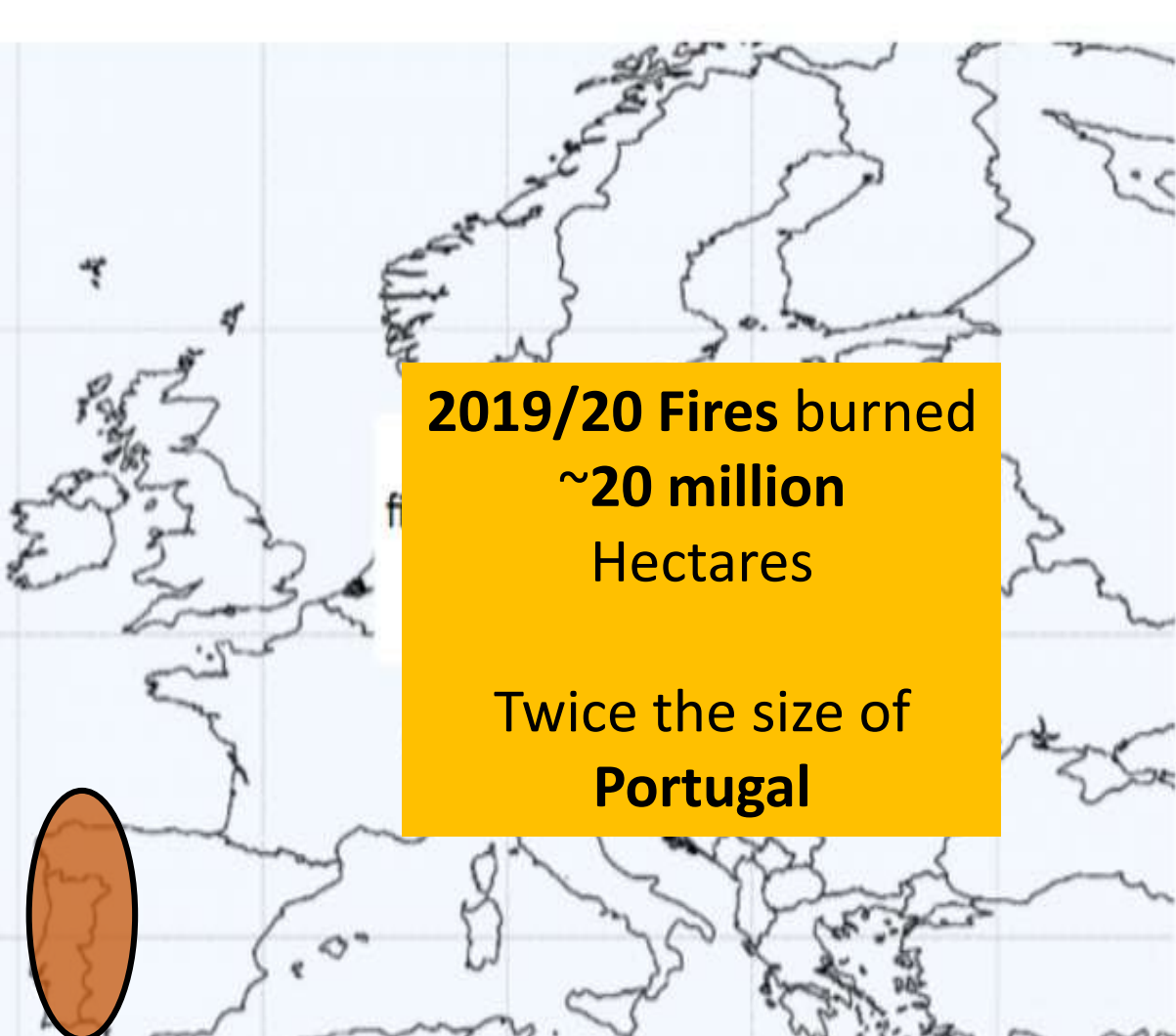
Avg 85% caused by humans - <15% by lightning

**2019/20**



**1974/4 Fires burned  
~110 million  
Hectares**

**Size of France, Spain  
& Portugal**



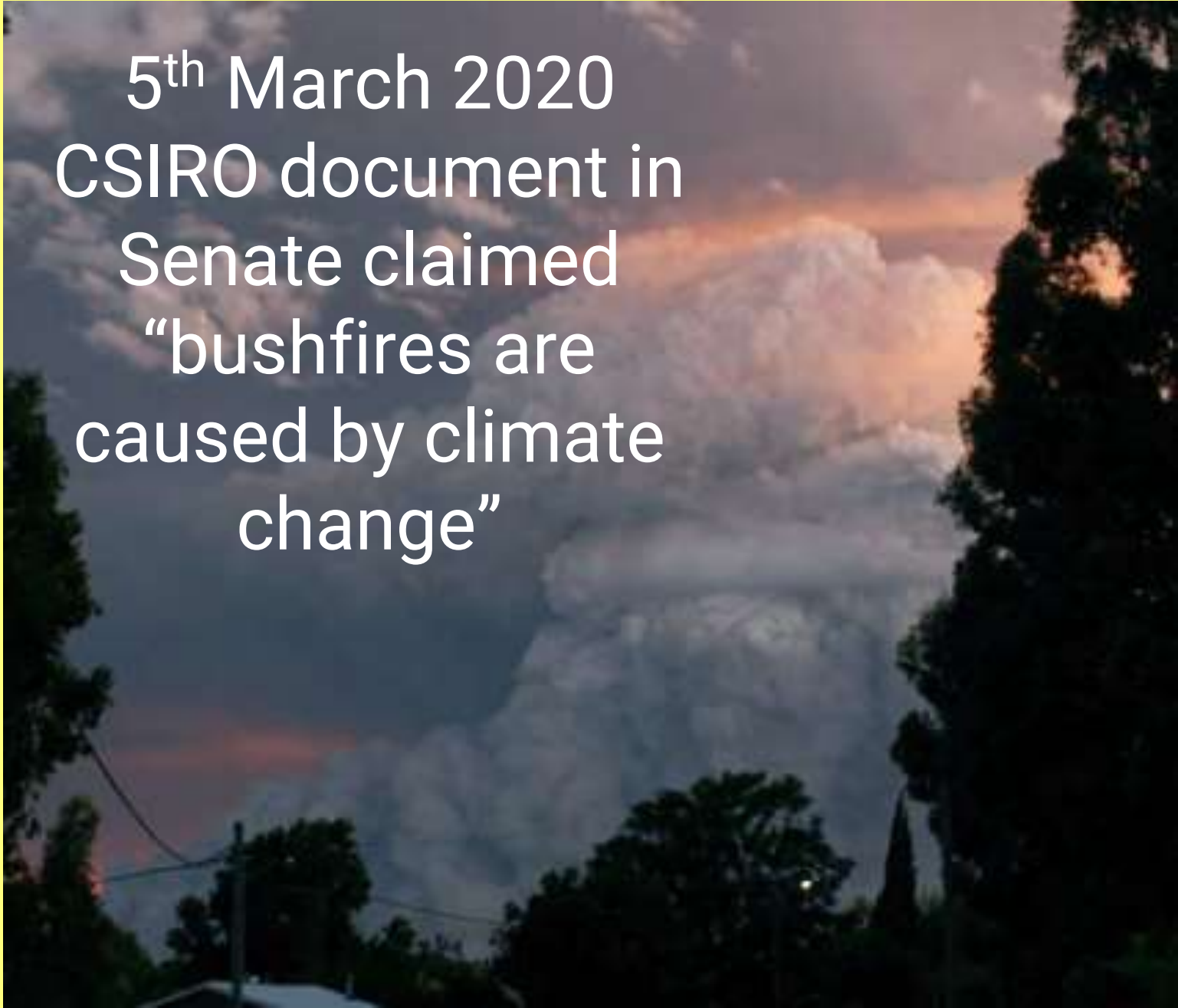
**2019/20 Fires burned  
~20 million  
Hectares**

**Twice the size of  
Portugal**

Pyro-cumulonimbus  
cloud from Waroona  
fire near Perth 2016

But CSIRO's  
published view is that

**'... no studies explicitly  
attributing the  
Australian increase in  
fire weather to  
climate change,  
have been performed'**



5<sup>th</sup> March 2020  
CSIRO document in  
Senate claimed  
"bushfires are  
caused by climate  
change"



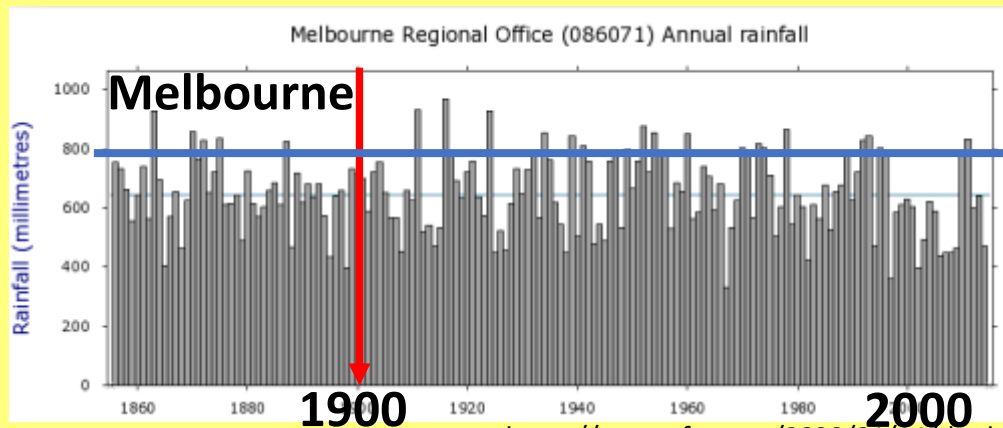
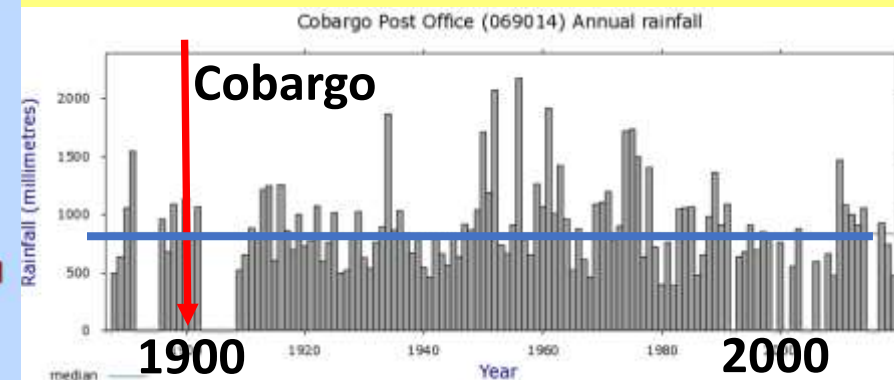
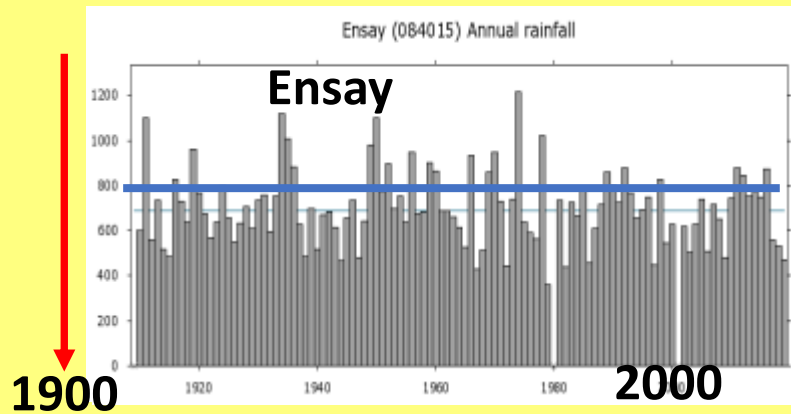
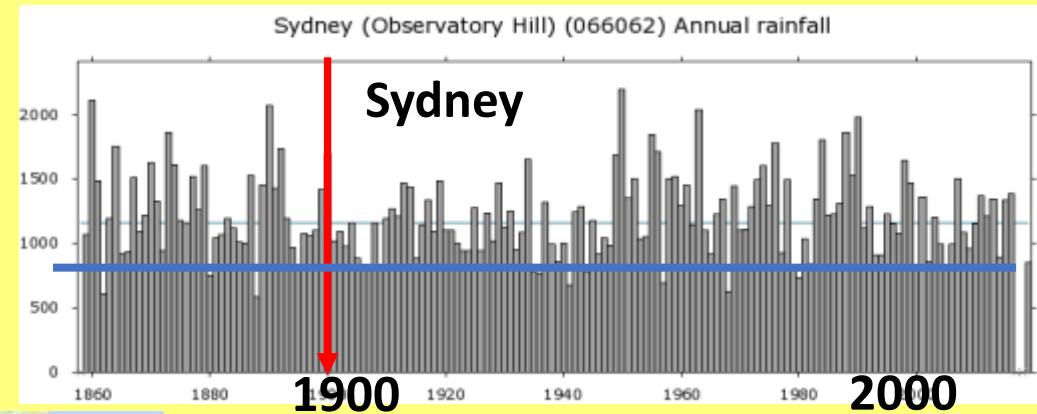
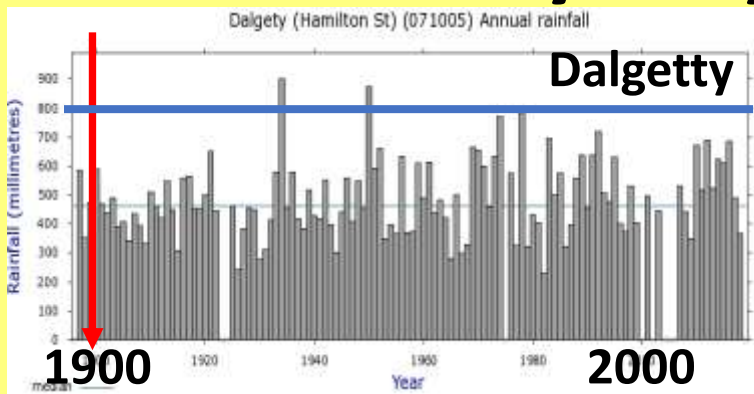
Some two  
months later  
Eucalypts  
thriving



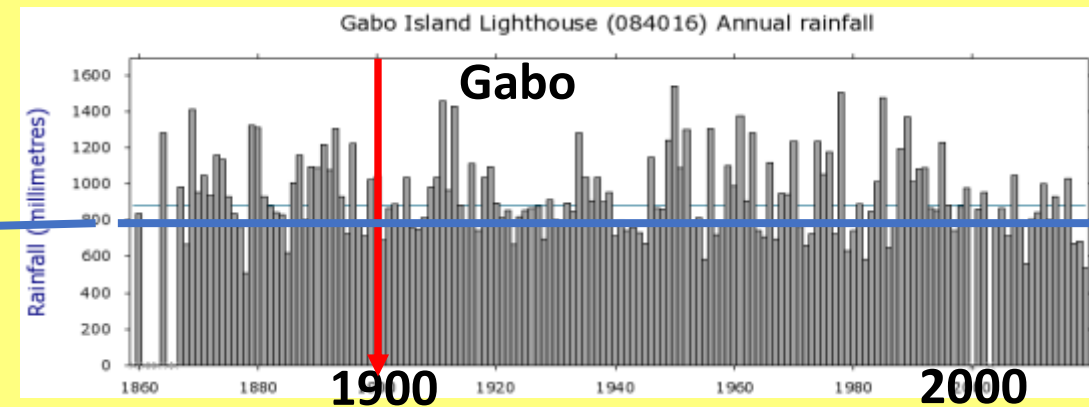
2019/20 Fires  
NOT the New  
Normal

# Rainfall: Sydney to Melbourne

Data says  
No Trend  
to warmer  
drier times



800mm



- **Background Stuff:**
- **Climate Change is a result not a cause & is always with us  
Global Warming comes and goes**

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- **AGW hypothesis: warming driven by human CO<sub>2</sub> emissions**  
**Data says it is not**

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Global Warming comes and goes
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Data says it is not
- CO<sub>2</sub> is greening the planet
- **60 years+ of climate change panics .....**  
**Which never materialise**

**Part 2:**

**Predictions**

**Projections**

**Panics**

WONT  
QUOTE OF THE MILLENNIUM  
"IF WE CUT EMISSIONS TODAY, GLOBAL  
TEMPERATURES ARE NOT LIKELY TO  
DROP FOR ABOUT A THOUSAND YEARS" \*

TIM FLANNERY  
MARCH 2011



Desalination Plants will save us;  
**Dead Wrong**

## 2006: Australia's IPCC hero Tim Flannery predicted that by 2016:

Peak oil production approaching **Wrong**

Oil prices to increase 2 or 3 times; **Wrong**

Low lying areas will be flooded; **Not yet**

Increased Cyclones damage; **Wrong**

Warragamba Dam never be full; **it is**

# **Expert Opinion Fails - again and again**

**1970: 1st Earth Day: civilisation to end in <30 years**

**1989: UN: only have 11 years left ~350 ppm**

<https://wattsupwiththat.com/2019/03/03/icymi-the-u-n-told-us-wed-have-disaster-by-year-2000-if-global-warming-was-not-checked/>

**1999: Guardian: global meltdown ~370 ppm**

<http://www.theclimatebet.com/tipping-point-10-years-on-who-won-the-armstrong-gore-bet-on-the-climate/>

**2006 Al Gore: only 10 years left ~380 ppm**

<https://www.theguardian.com/environment/2018/oct/08/global-warming-must-not-exceed-15c-warns-landmark-un-report>

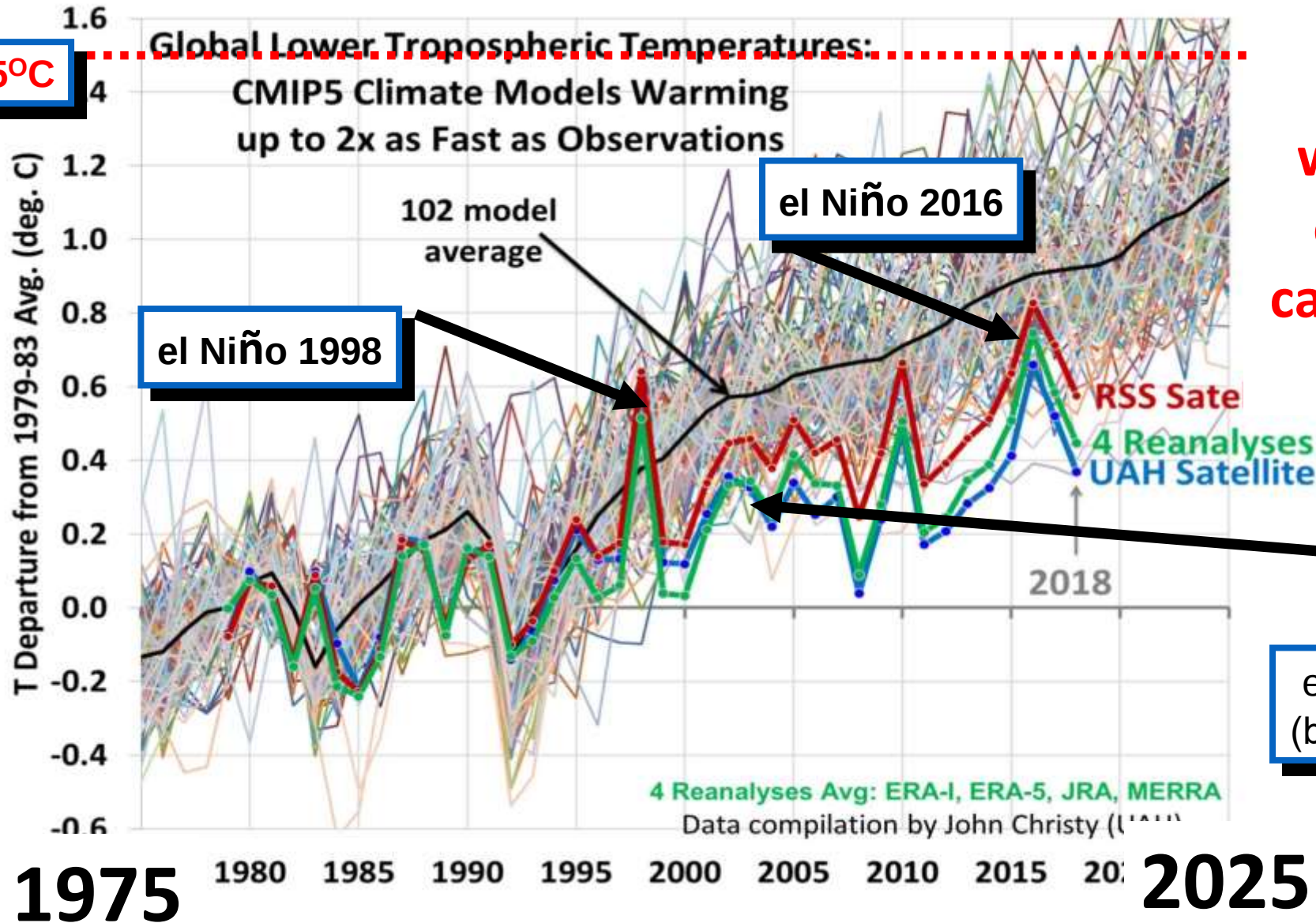
**1980s Acid Rain**

**2018 IPCC: only <12 years left ~410 ppm**

**Climate Emergency - doomed by 125ppm CO<sub>2</sub>**

# IPCC Spaghetti Models much too hot ..... WHY?

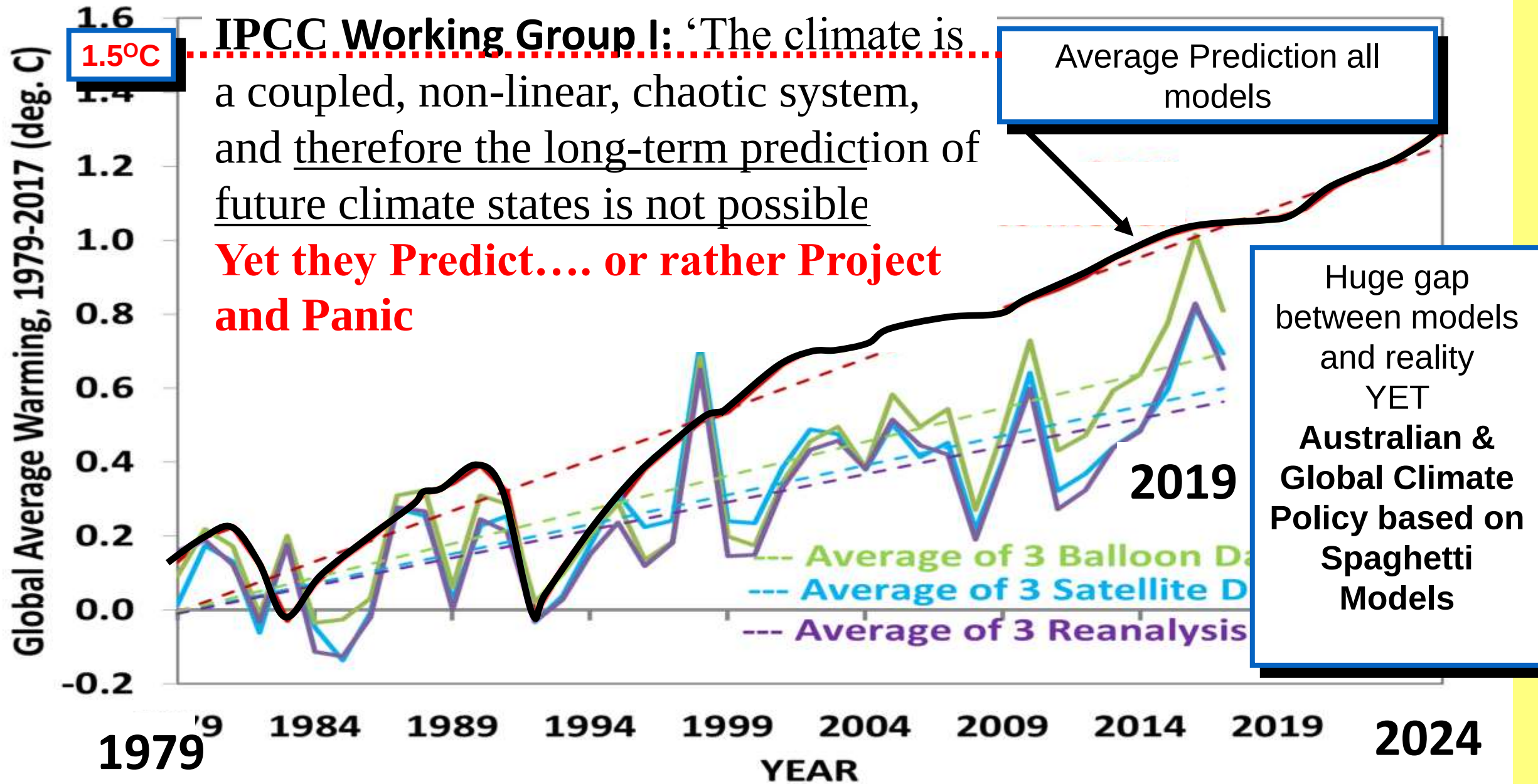
1.5°C



**WHY keep below  
1.5°C  
when that may only  
occur if IPCC worst  
case predictions come  
true?**

Real temps 0.3°C  
Well below  
1°C Modelled

el Niños are (a) natural and  
(b) IPCC models can't predict



# No Panic: Sea Level Rise Not Accelerating

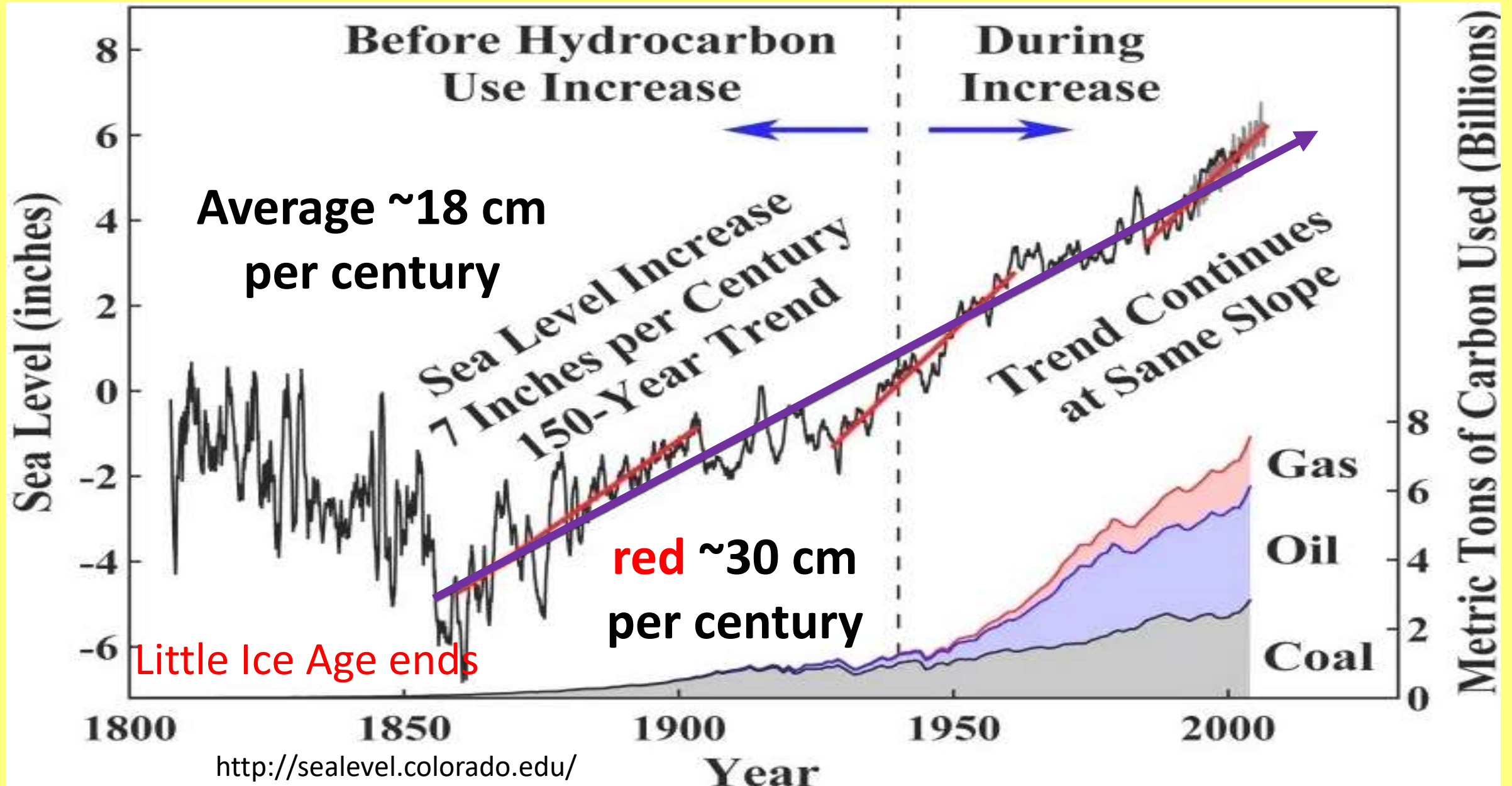
Consequences...the great human migrations  
when sea level was >100m below present

62k and again 19k years ago.  
Could see Australia from Timor

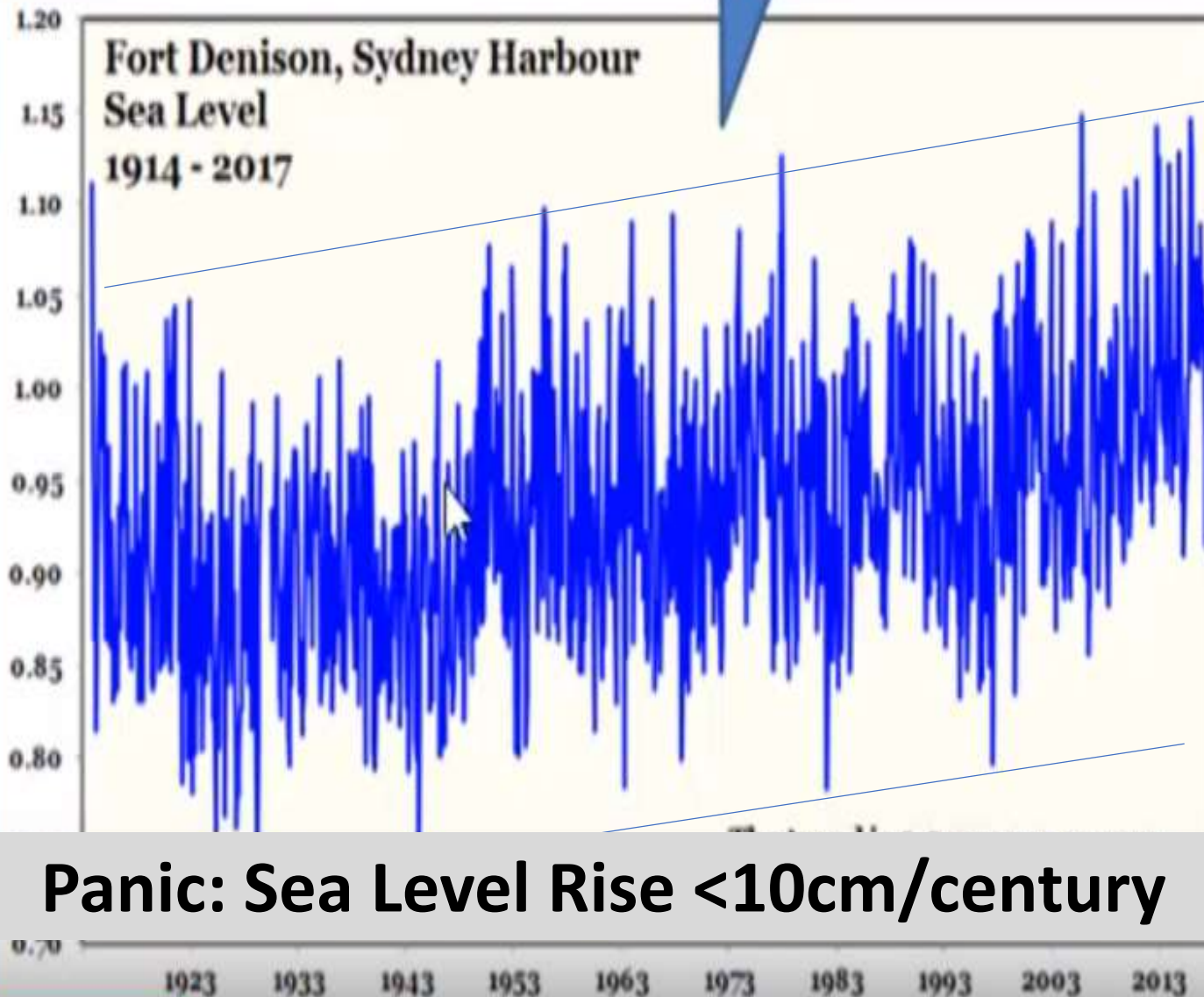
COASTLINE TODAY



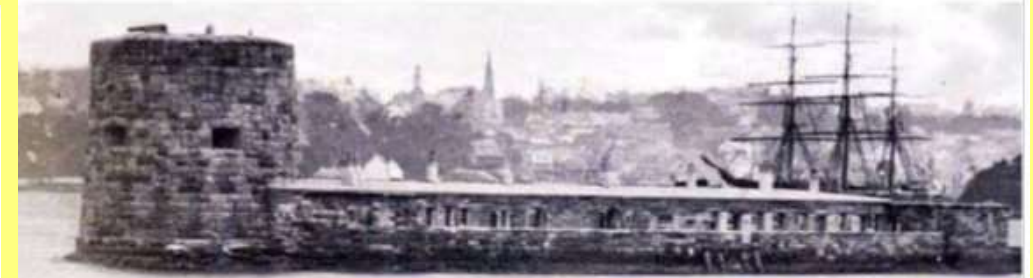
# No Panic: Global Sea Level Rise NOT accelerating



# No Panic: TIDAL MOVEMENTS AT FORT DENISON, SYDNEY 1914:2017



## SCARY SEA LEVEL RISE ON SYDNEY HARBOUR



Fort Denison c.1885



Fort Denison c.1930



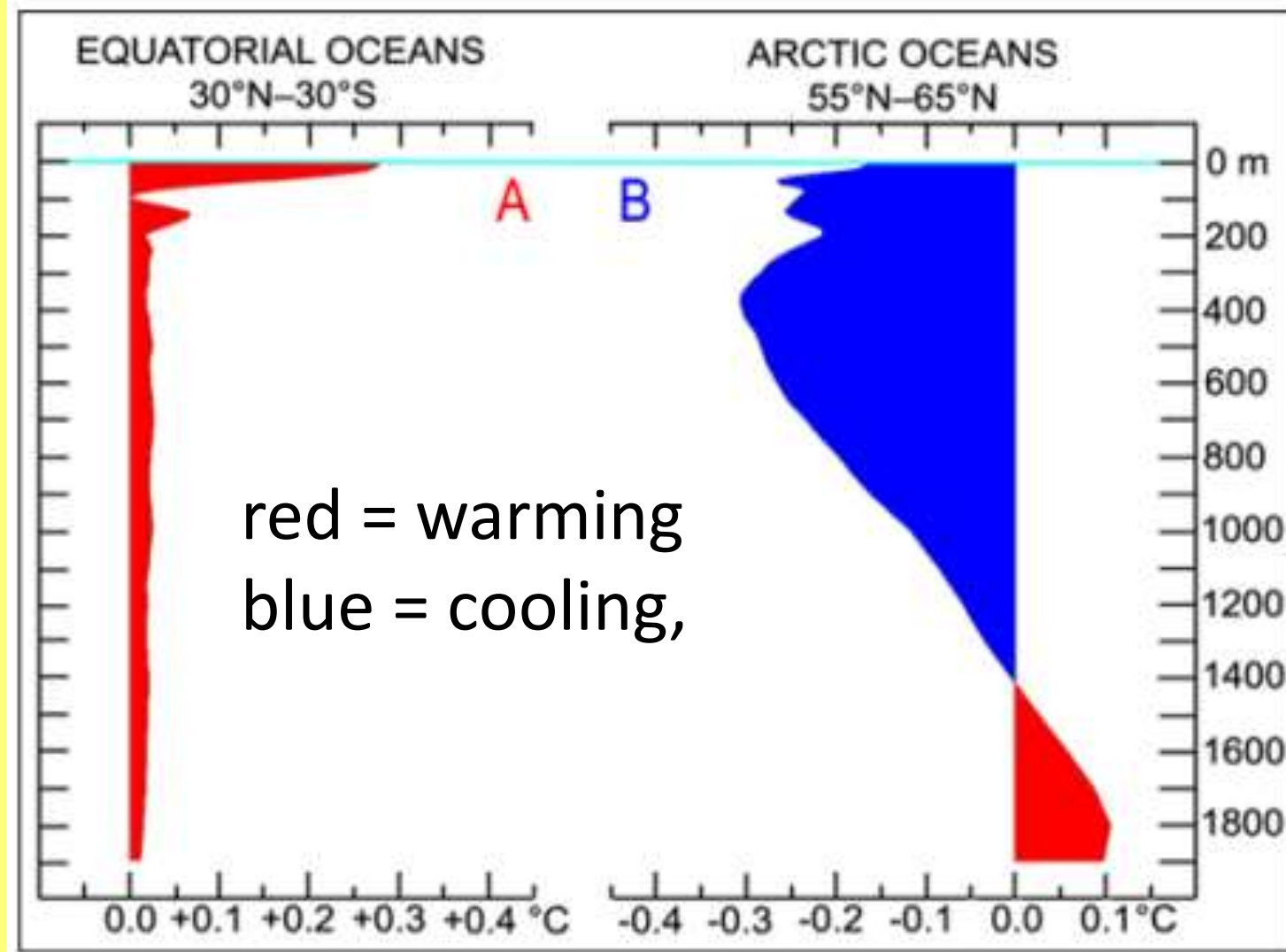
Fort Denison c.2016

Sea Level rise (1886-2010) 0.65mm/year = 6.5cm (2.5")/Century



**ARGO temperature records 2004-2019 shows IPCC claim of 1.1mm/yr expansion due to global warming incorrect.**

**Equatorial  
warming  
gives sea  
level  
increase of  
1.2mm or  
+0.08mm/yr**



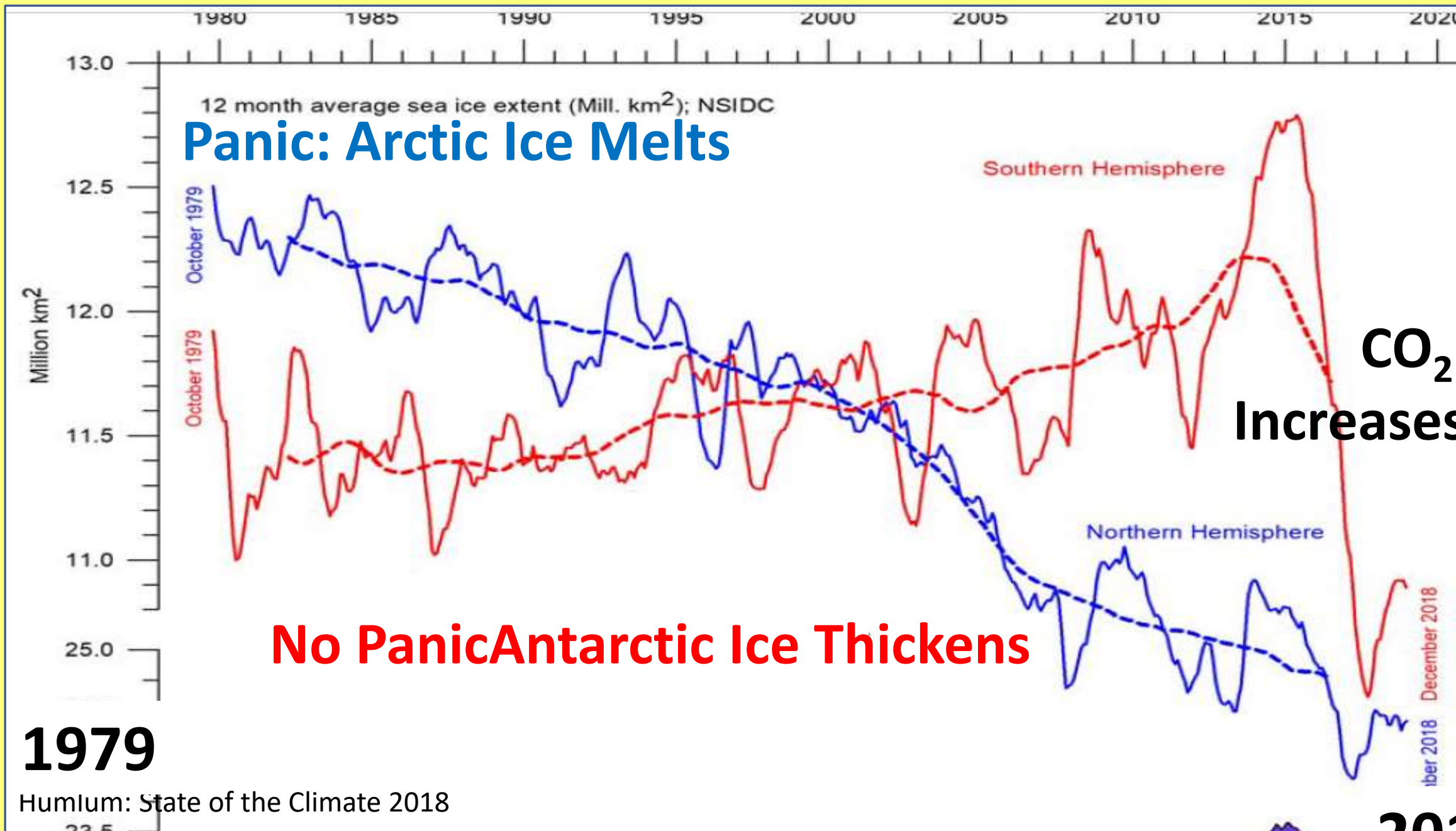
**Arctic  
cooling  
gives sea  
level  
fall of  
-4.9mm or  
-3.3mm/yr**

# Opposite Panics

**2009 *Scientific American*:** A slowdown in ocean currents “will alter African and Indian monsoon rainfall ... resulting in *a profound impact on the global climate system.*”

**2020 *Scientific American*:** “More climate change may mean a greater strengthening of ocean winds, and potentially, even faster ocean circulation.”

**Exactly the opposite**



**Panic: Arctic Ice Melts**

**CO<sub>2</sub>  
Increases**

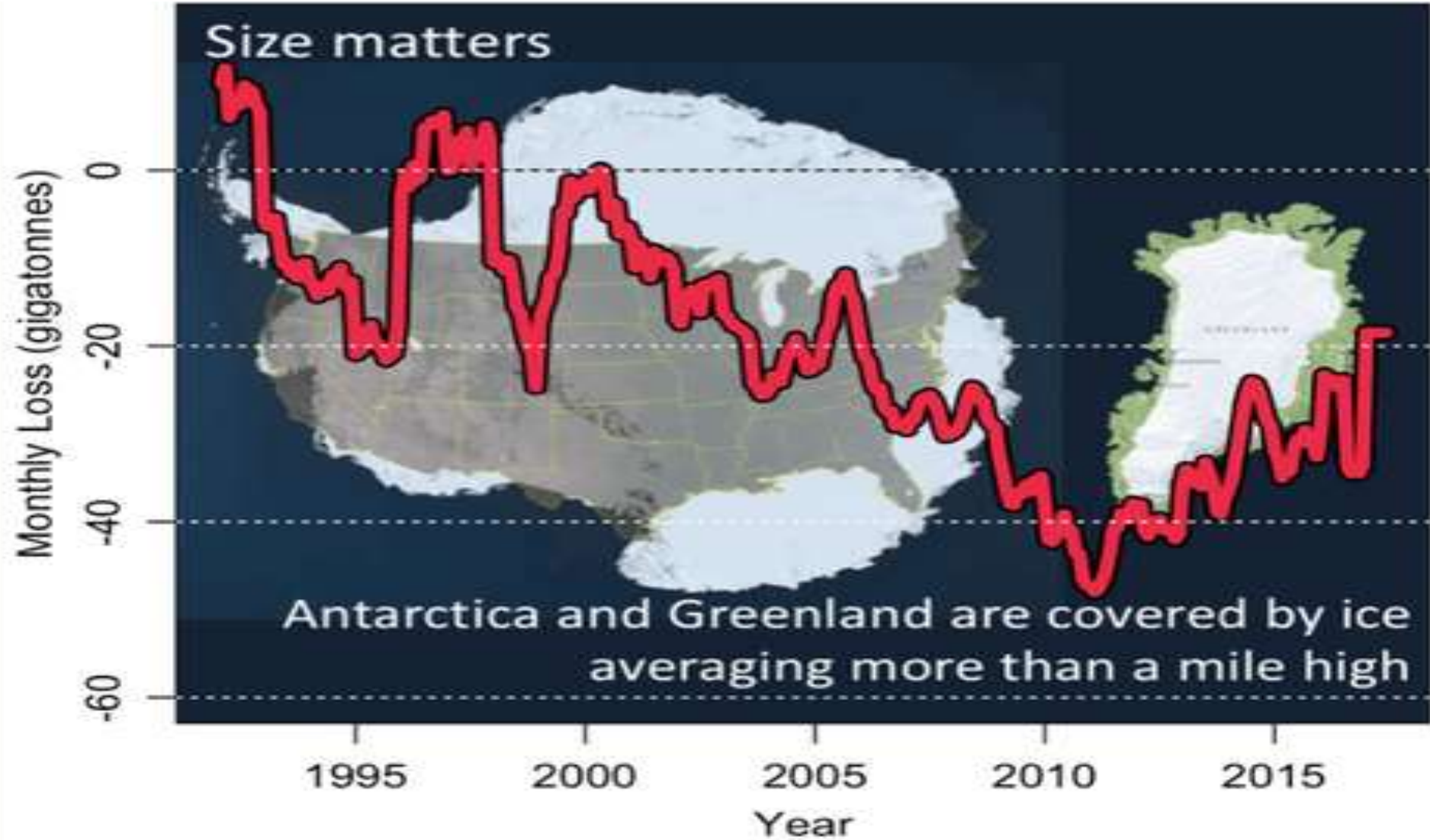
**No Panic Antarctic Ice Thickens**

**1979**

Humlum: State of the Climate 2018

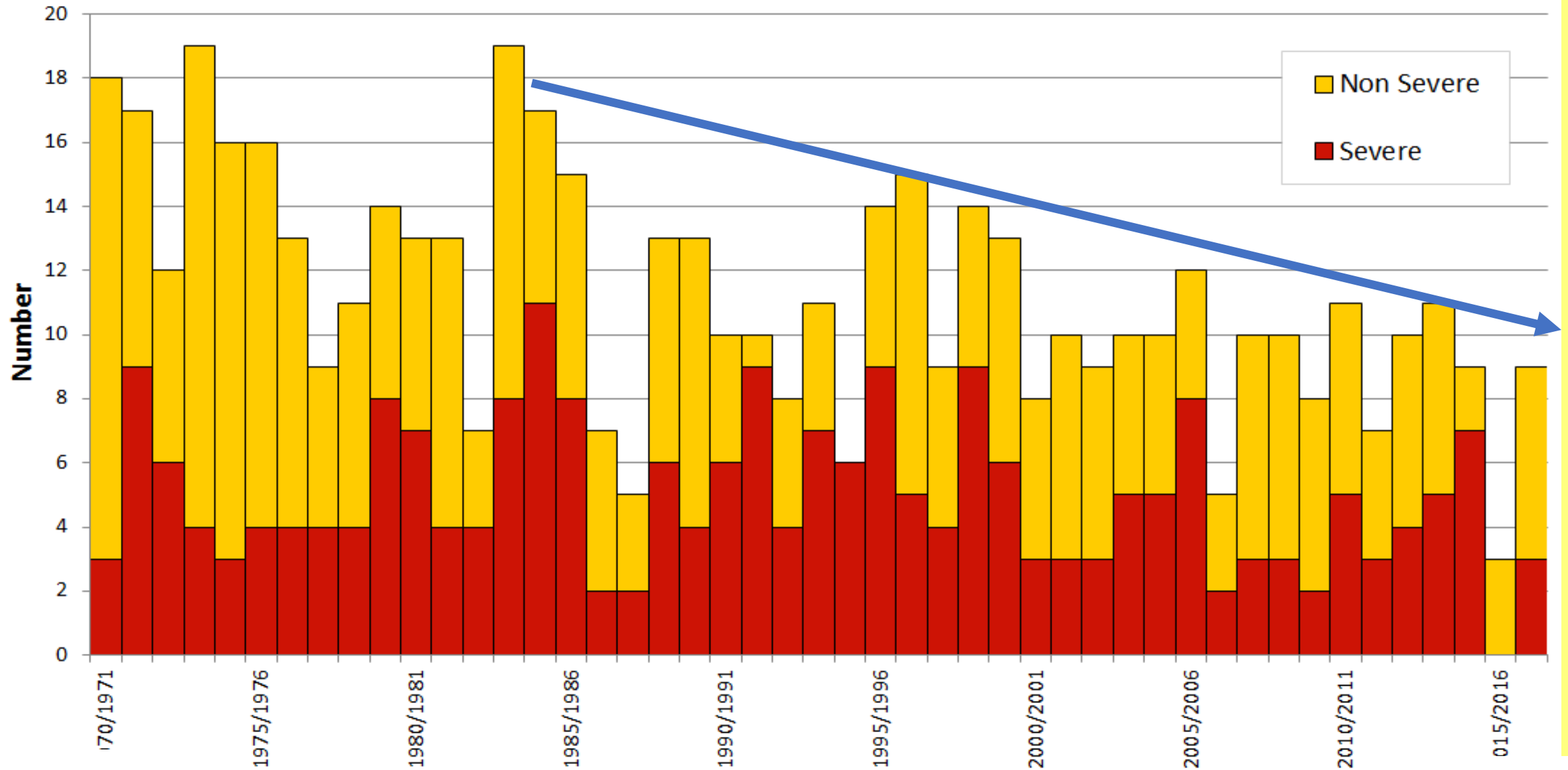
**2018**

# Monthly Ice loss Antarctica & Greenland Combined



DATA: <http://imbie.org/data-downloads/>

# No Panic: Australian Cyclone Frequency NOT increasing



1971

Season

2016

<http://www.bom.gov.au/cyclone/climatology/trends.shtml>

Average number of very hot days (1910-2016)

Australian Bureau of Meteorology

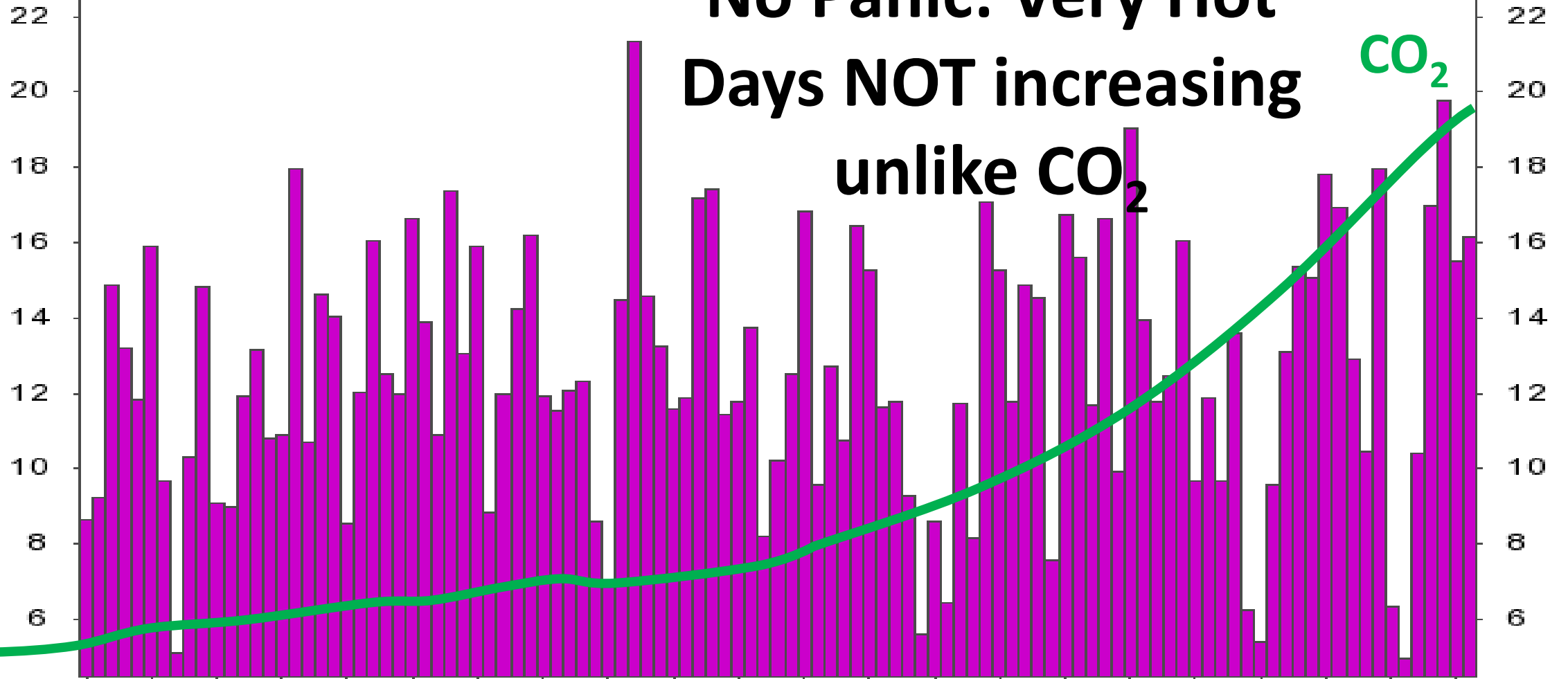
Number of very hot days

**No Panic: Very Hot  
Days NOT increasing  
unlike CO<sub>2</sub>**

CO<sub>2</sub>

1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010

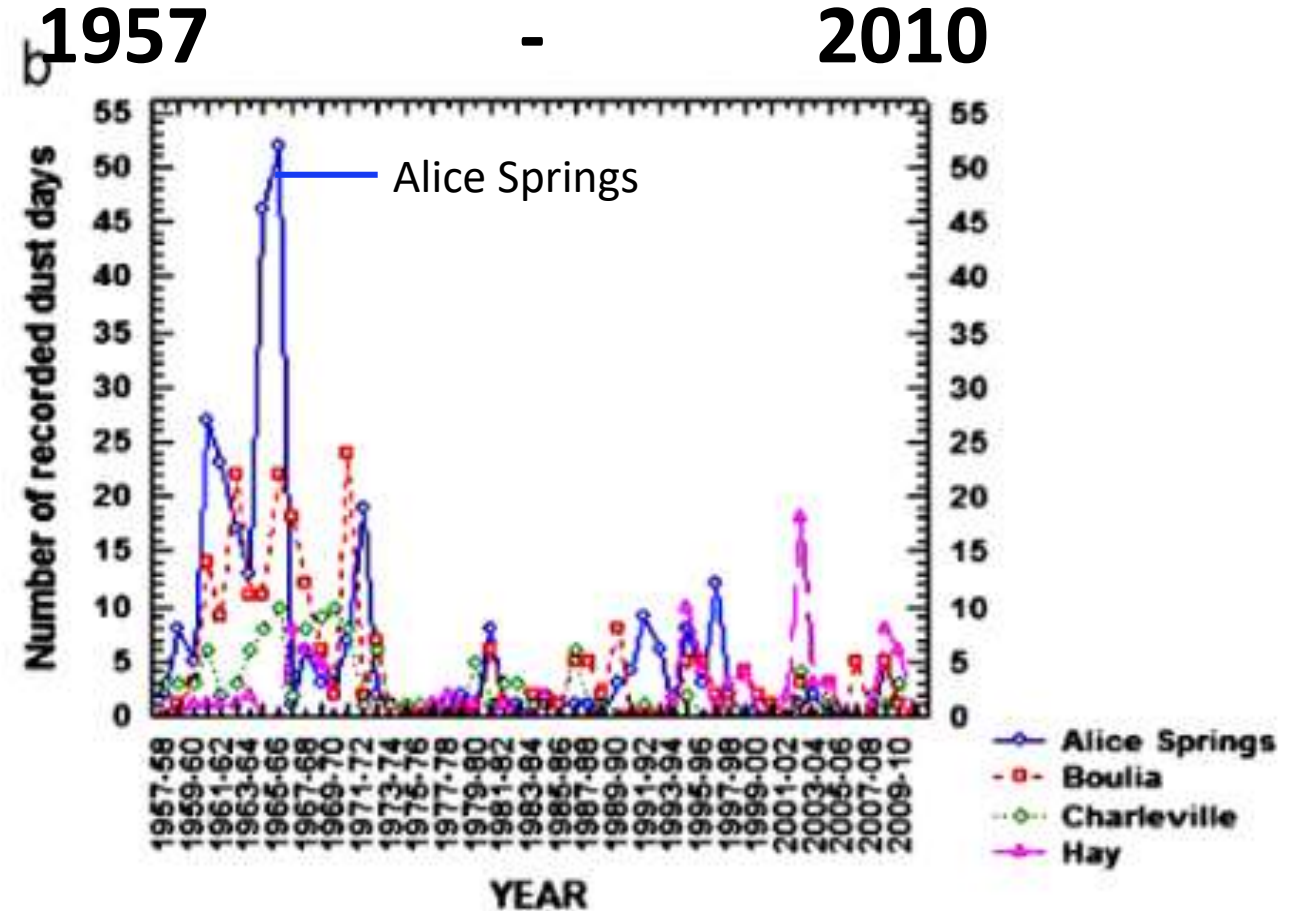
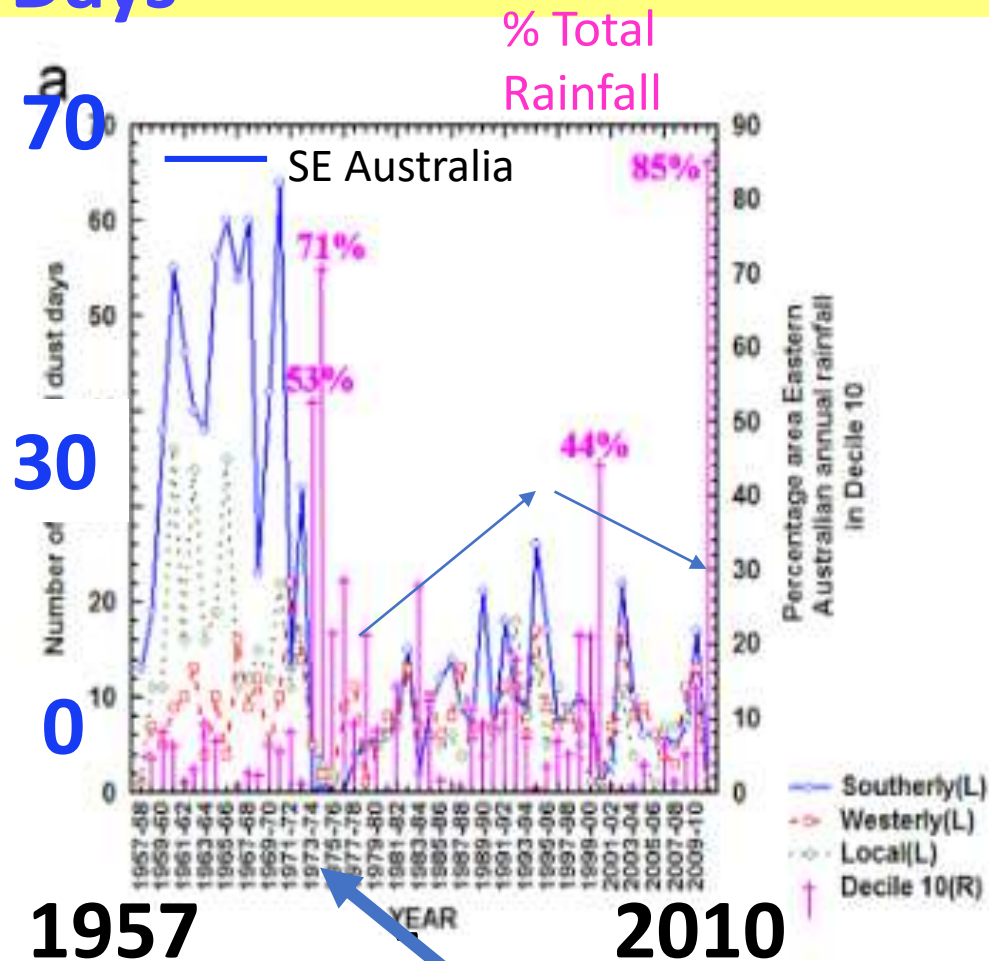
Year



# No Panic: Dust Storms & Rainfall NOT Increasing

Dust  
Days

Number of dust days SE Australia Sept- Feb - 1957-2010



Sudden CO<sub>2</sub> Free Climate Change in 1974

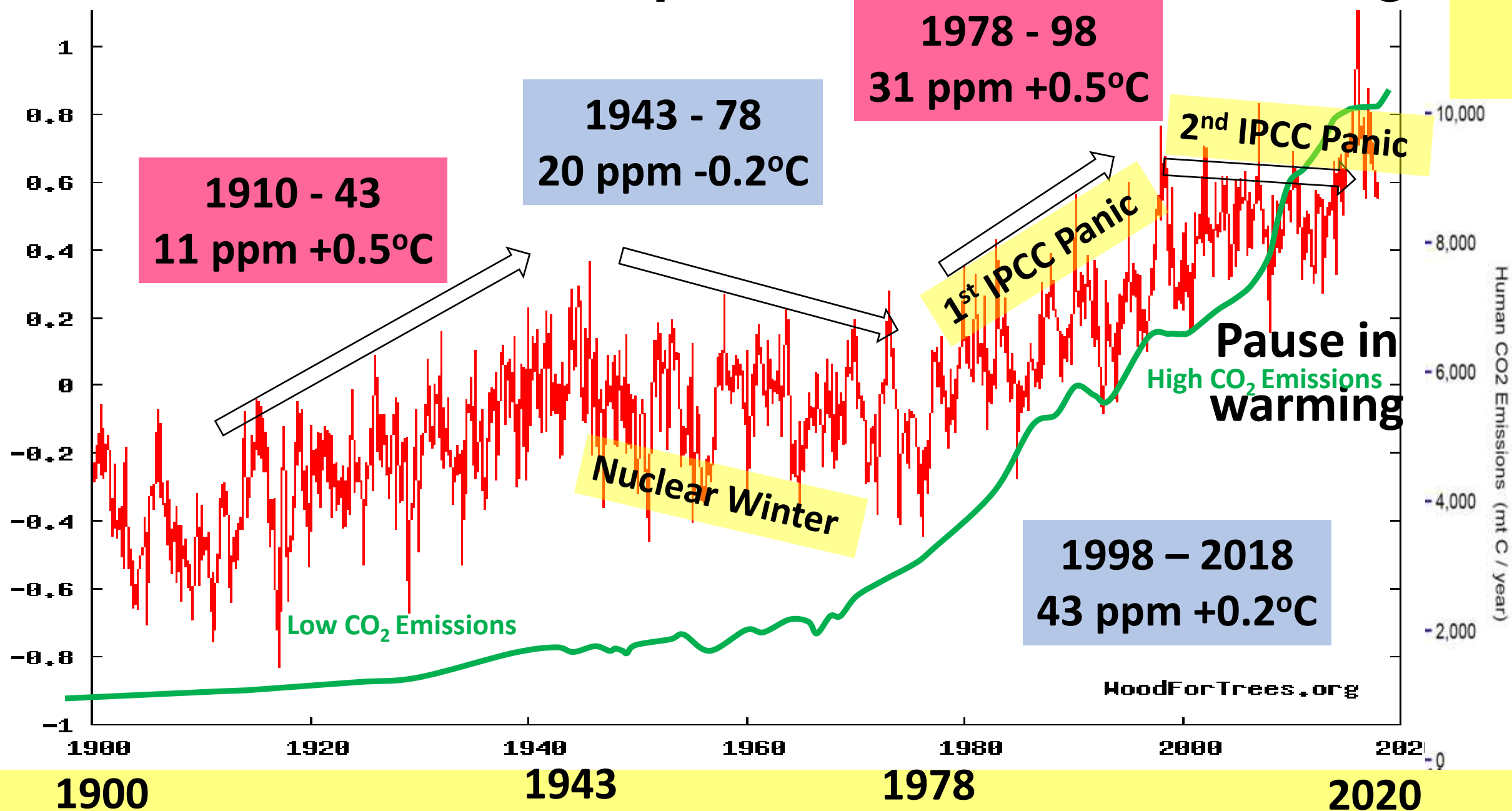
**Part 3:**

**CO<sub>2</sub>**

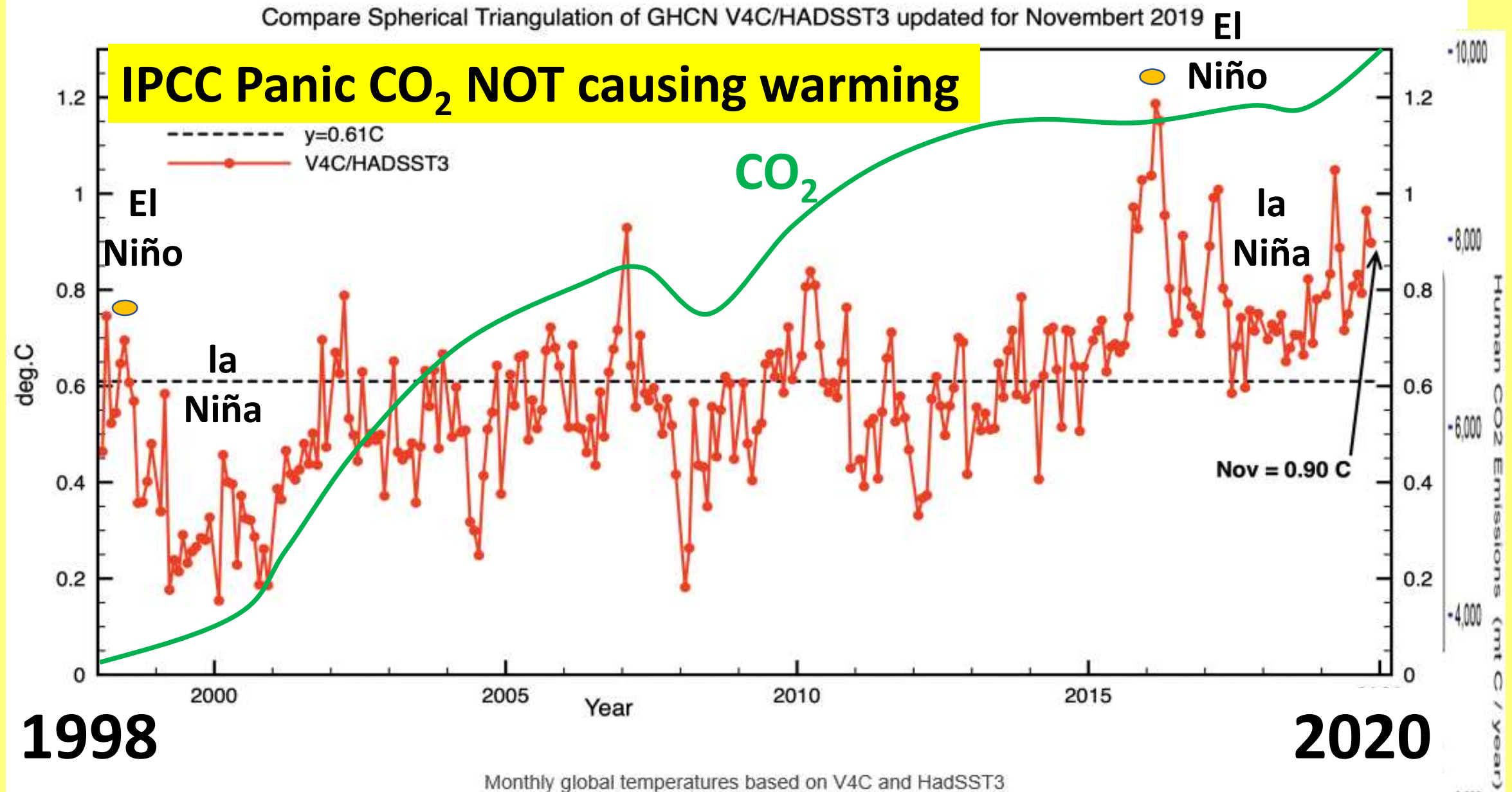
**and**

**Temperature**

# No Panic: Global Temperatures Not accelerating



# Monthly average global temperatures during *The Pause*

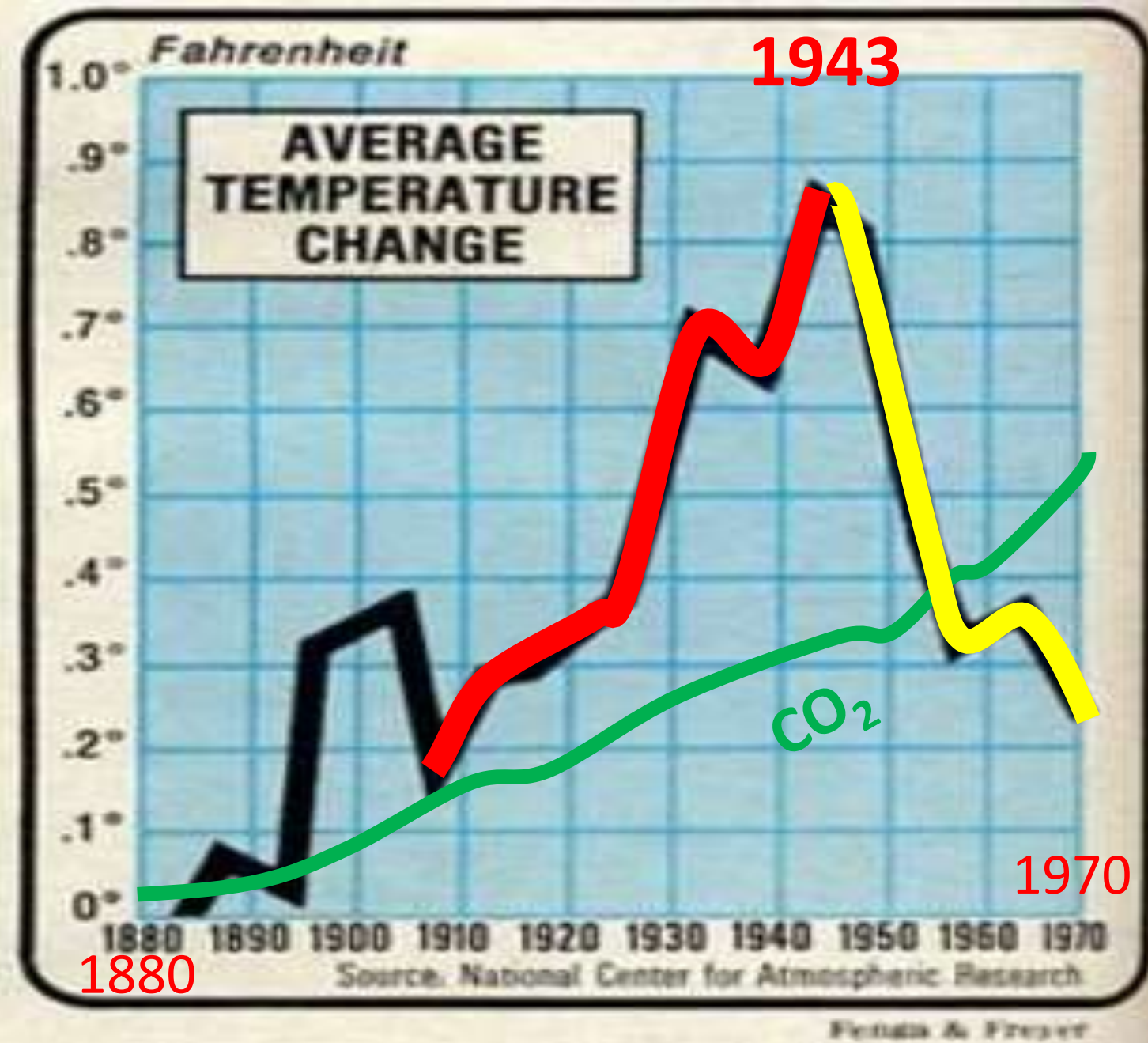


# IPCC Panic: Nuclear Winter and the Pause kill AGW



97% of 1970s  
scientists believed in  
global cooling –  
wanted ice-breaking  
tankers  
CO<sub>2</sub> not an issue

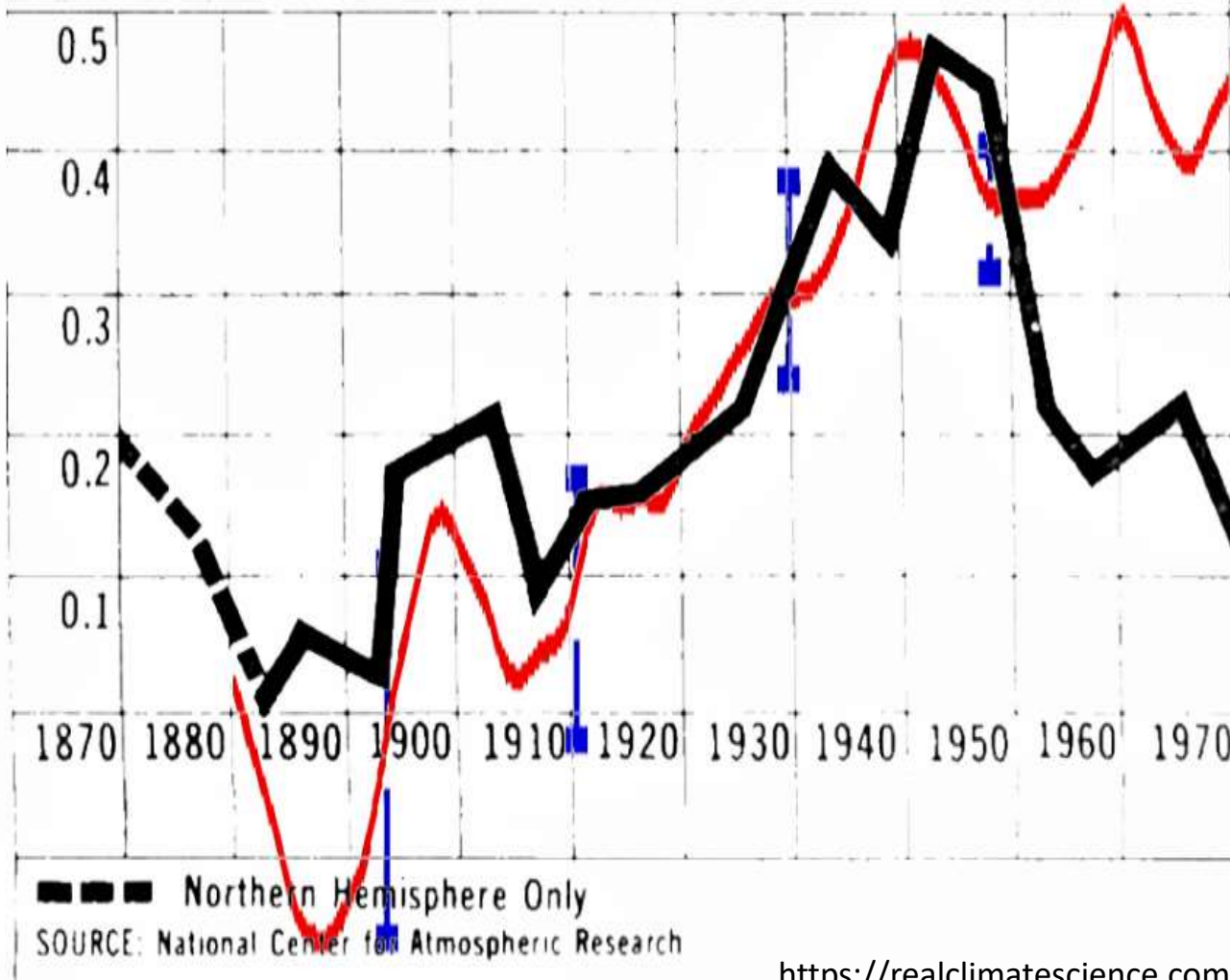
Now 97% believe  
in  
global warming!



# IPCC Panic Calmed by Climate Gate

## A CENTURY OF GLOBAL CLIMATE CHANGES

(Five year averages in mean surface air temperatures)



**NASA 2017**

**Nuclear Winter  
Vanishes**

**NCAR 1974**

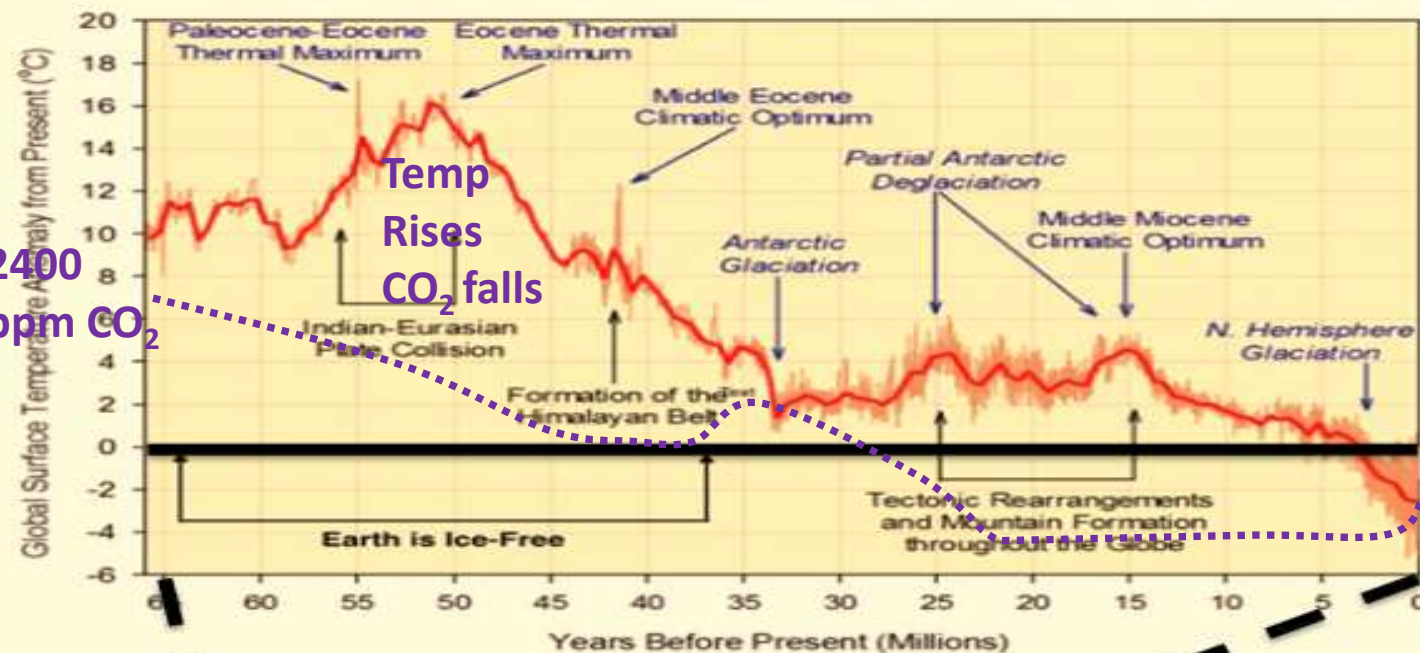
Never let the data  
get in the way of  
a good story

# Three Ice Ages with high CO<sub>2</sub>

2400  
ppm CO<sub>2</sub>

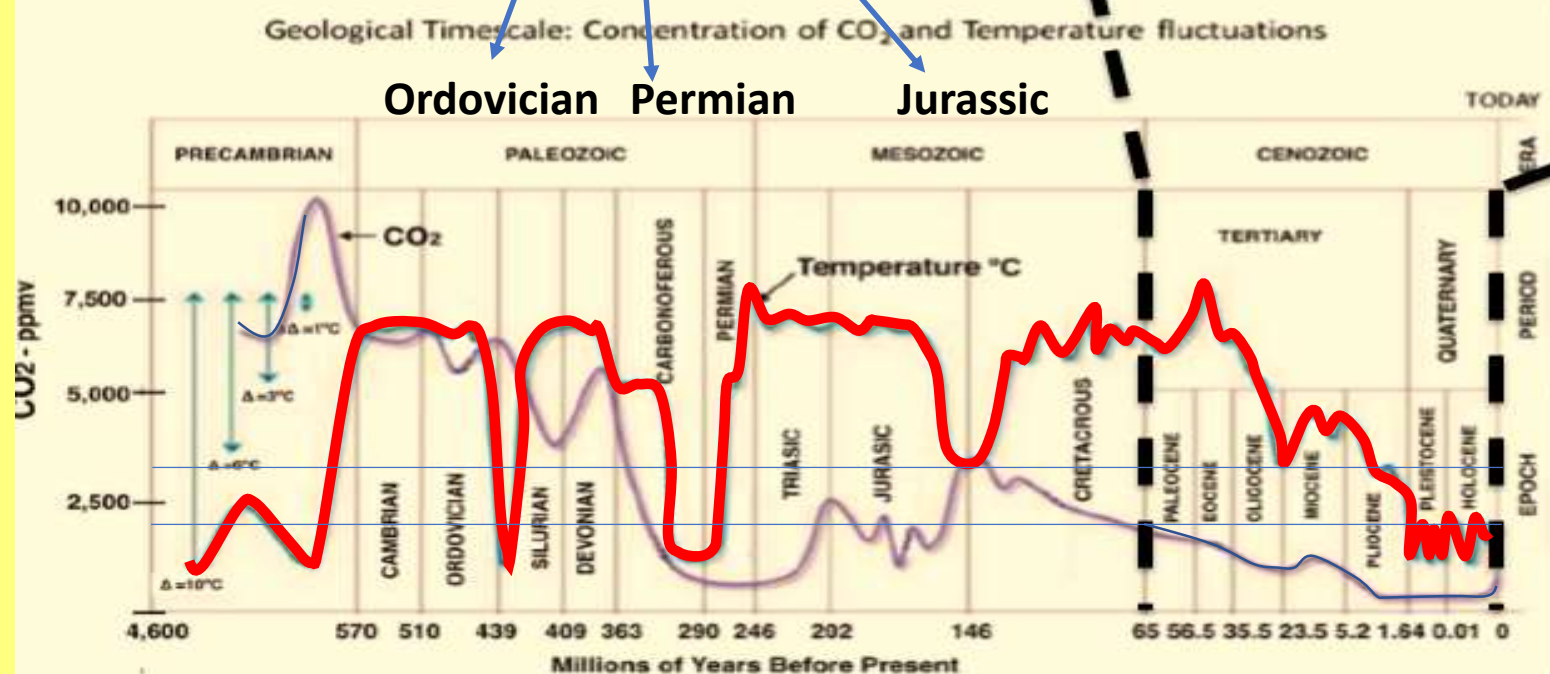
Temp  
Rises  
CO<sub>2</sub> falls

410  
ppm  
CO<sub>2</sub>



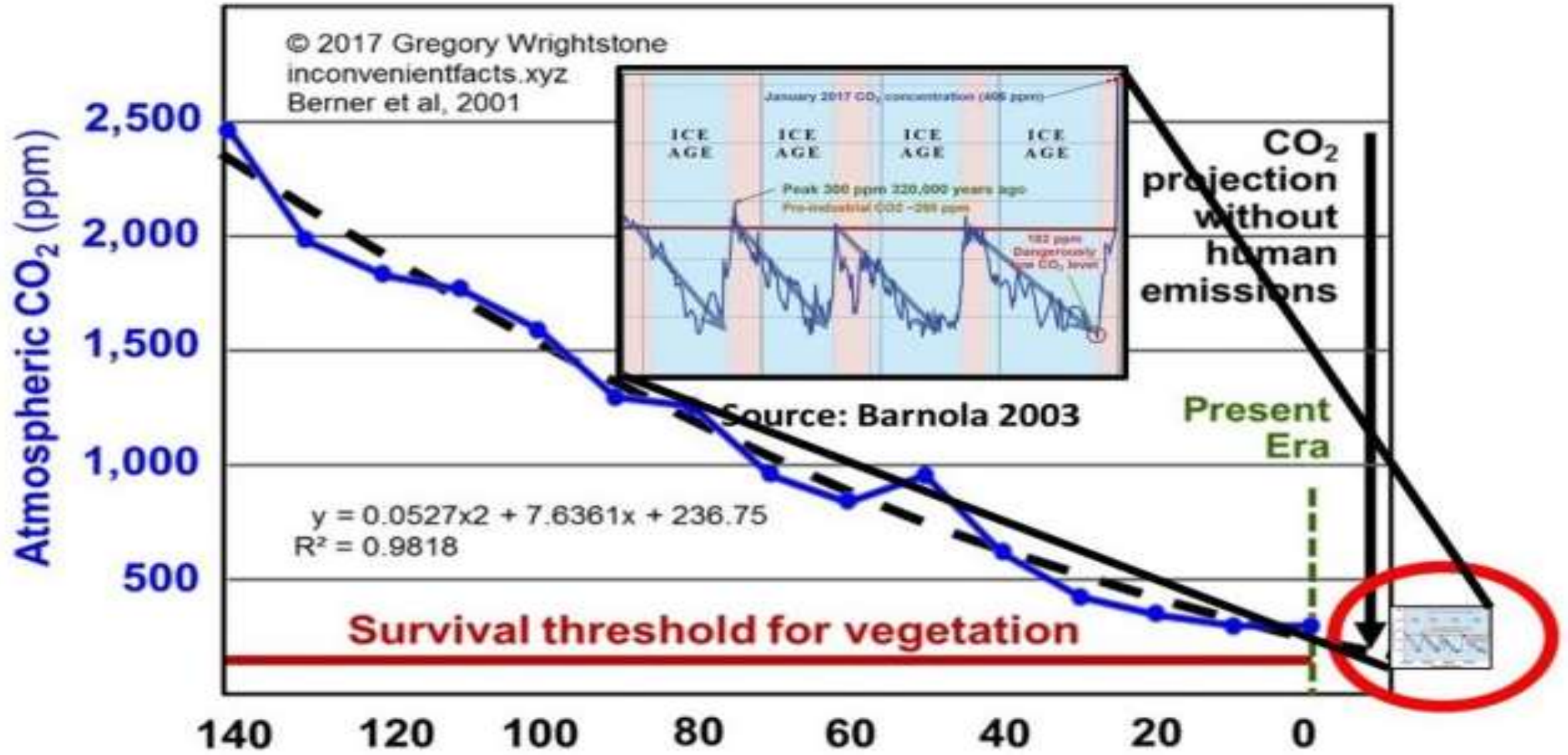
Geological Timescale: Concentration of CO<sub>2</sub> and Temperature fluctuations

Ordovician Permian Jurassic



65 million years of  
Tertiary  
Temperature  
change

From 2,500 ppm 140mya to 410 ppm, which is best?



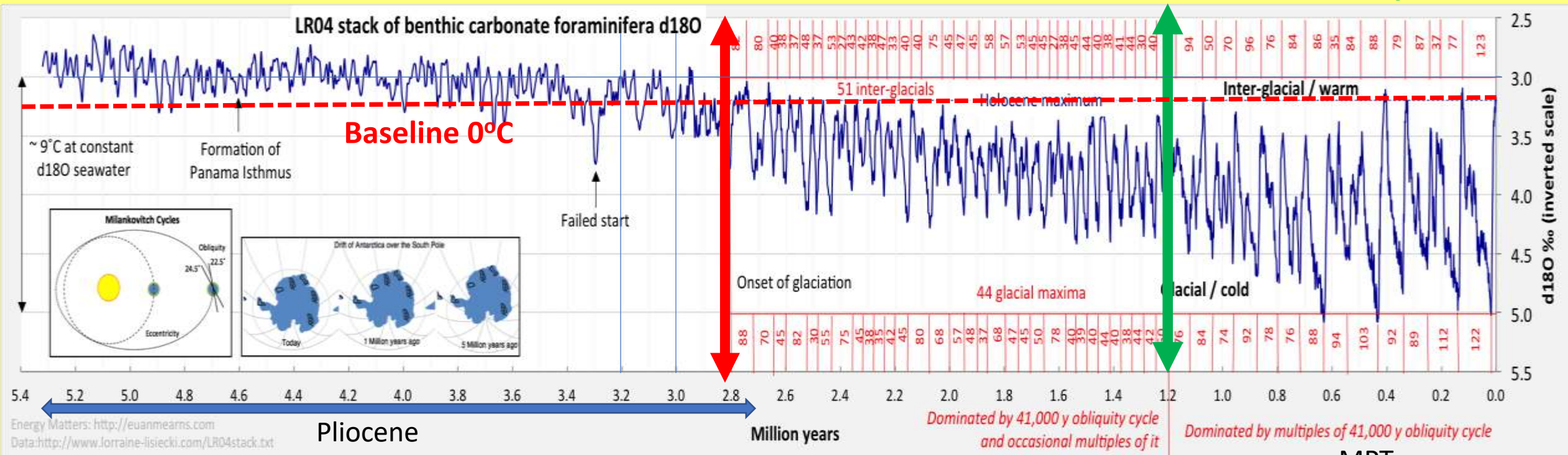
32 mya CO<sub>2</sub> starvation C<sub>4</sub> Photosynthesis Evolves

# Two Serious Climate Changes - Milankovitch Cycles

From ~3.4mya temp always > interglacials

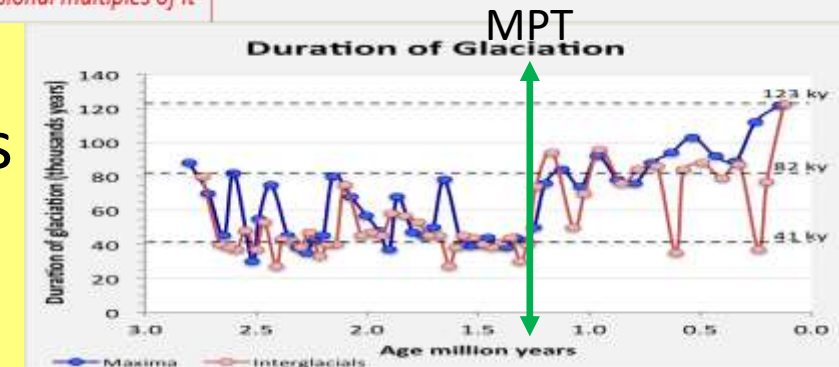
Mostly  
41,000 Year Cycles

Multiples of  
MPT 41,000 Year Cycles

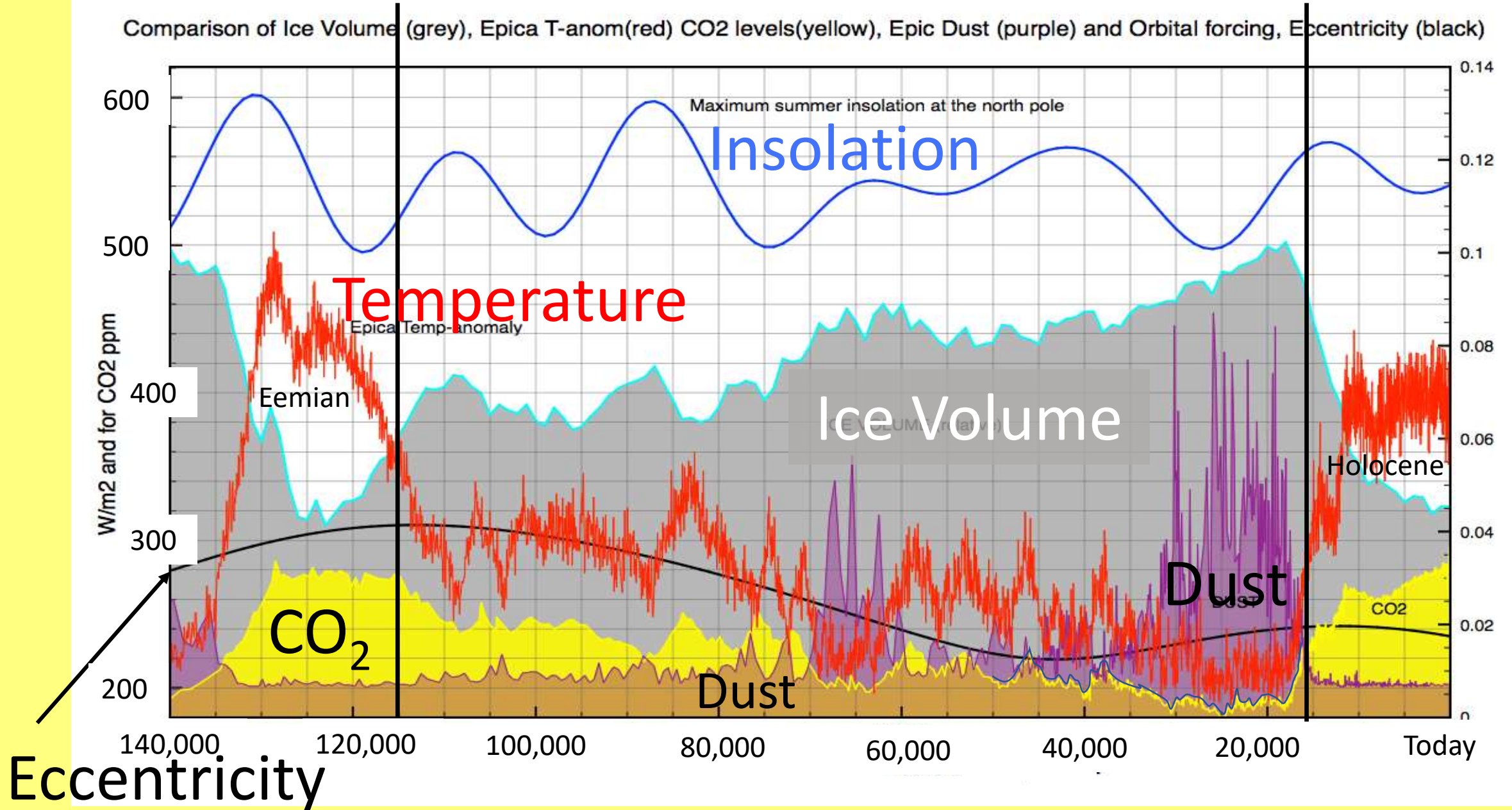


Cfact.org/2019/10/01/mann-hayhoe-caught-falsifyine-temperature-history-to-erase-medieval-warm-period/

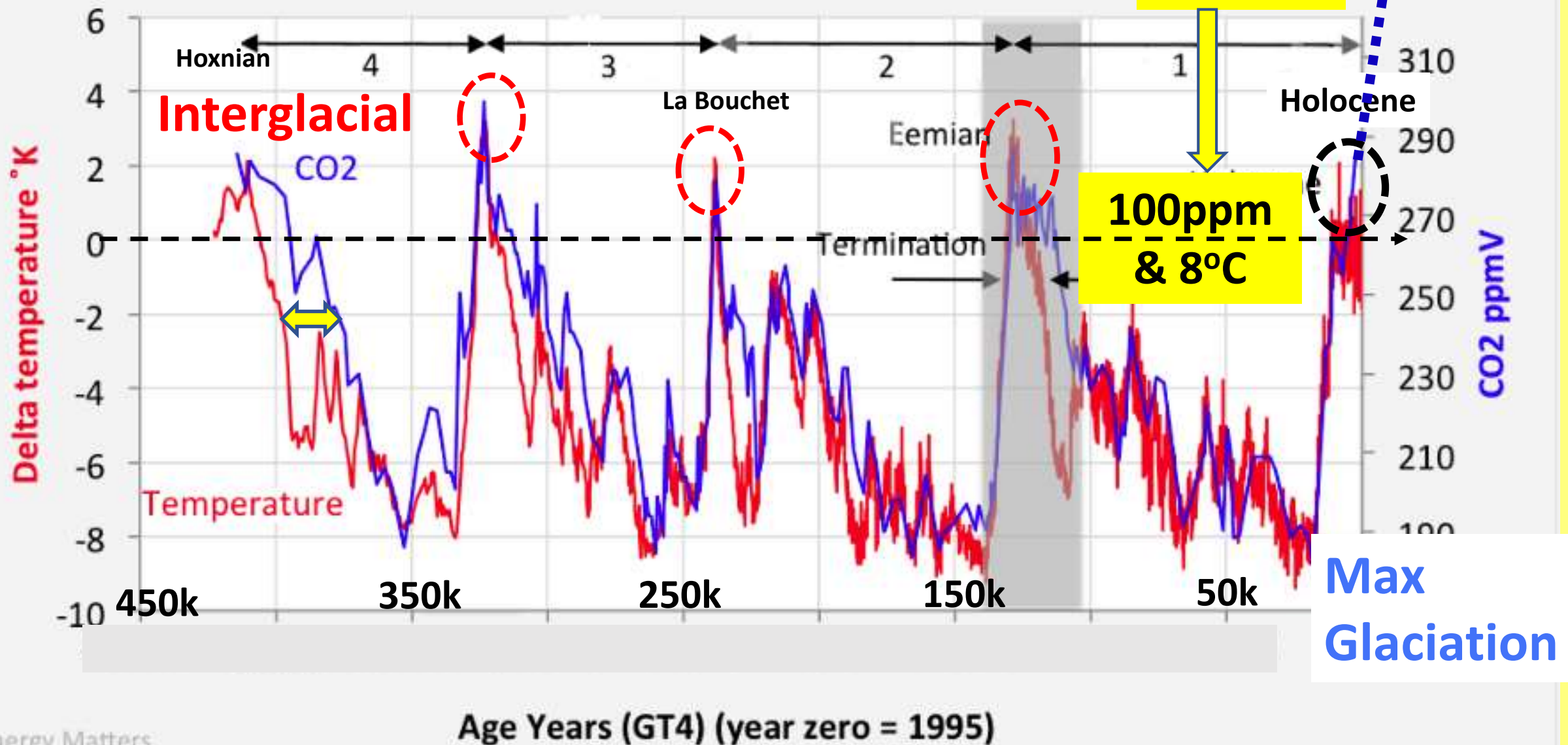
Change in pattern @ 2.8mya to 41,000 year cycles  
Change at MPT (Mid Pleistocene Transition)  
@1.2 mya to multiples of 41,000 year cycles



# Last and Longest Glaciation Cycle



# Half million years of Climate Change

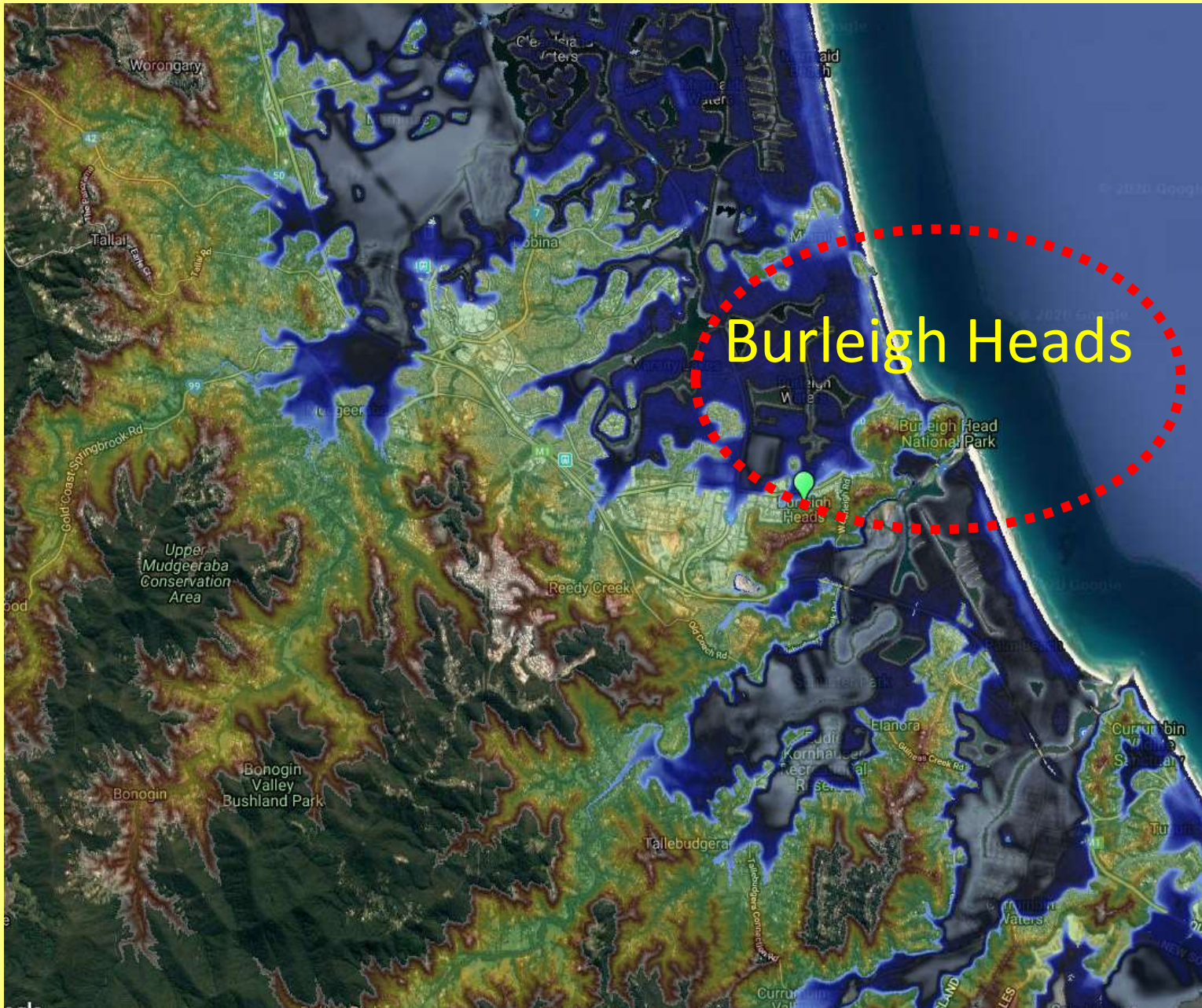


# Burleigh Headland - Raised Beach

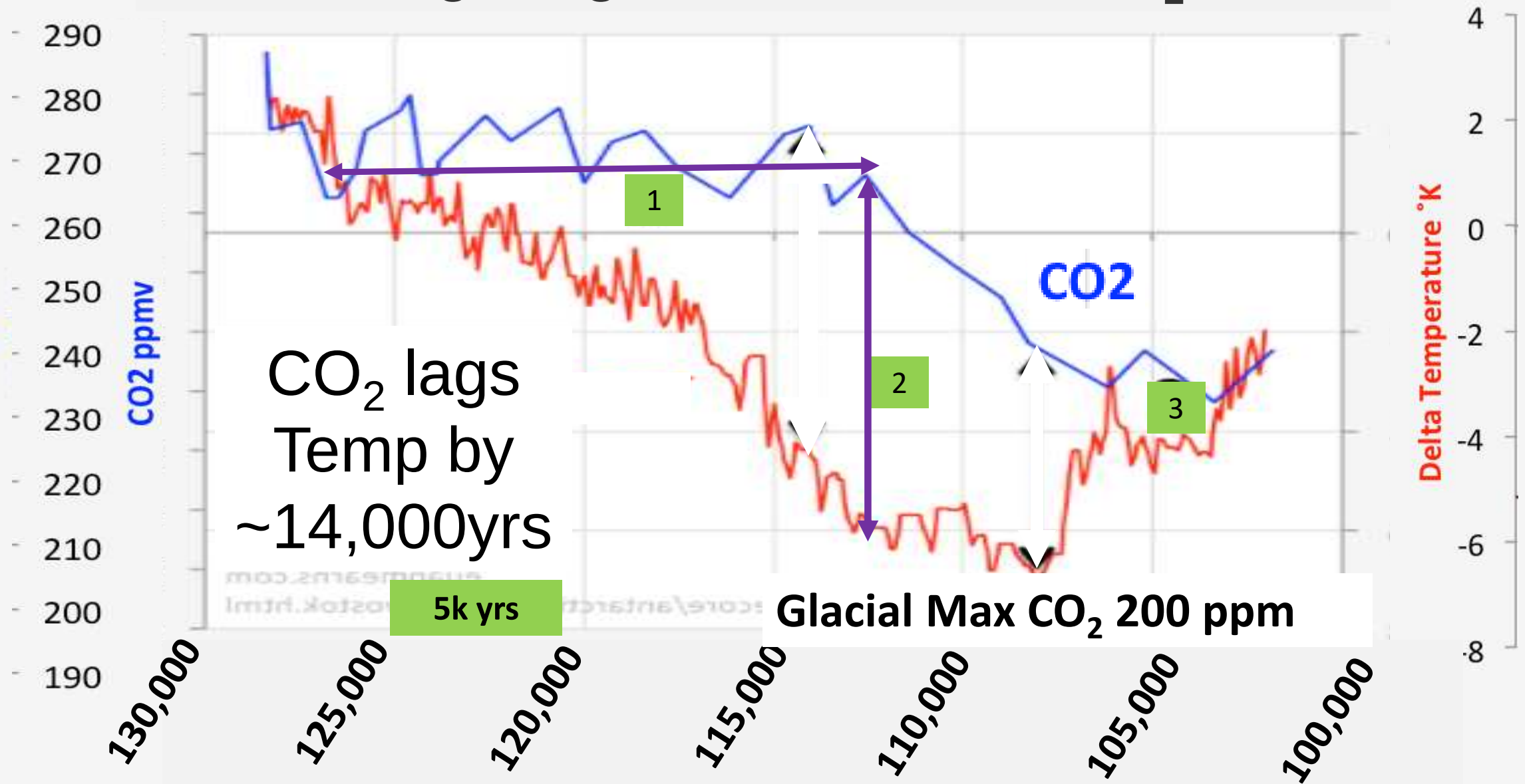


Approximately 130k years old ~10 metres above today's MSL

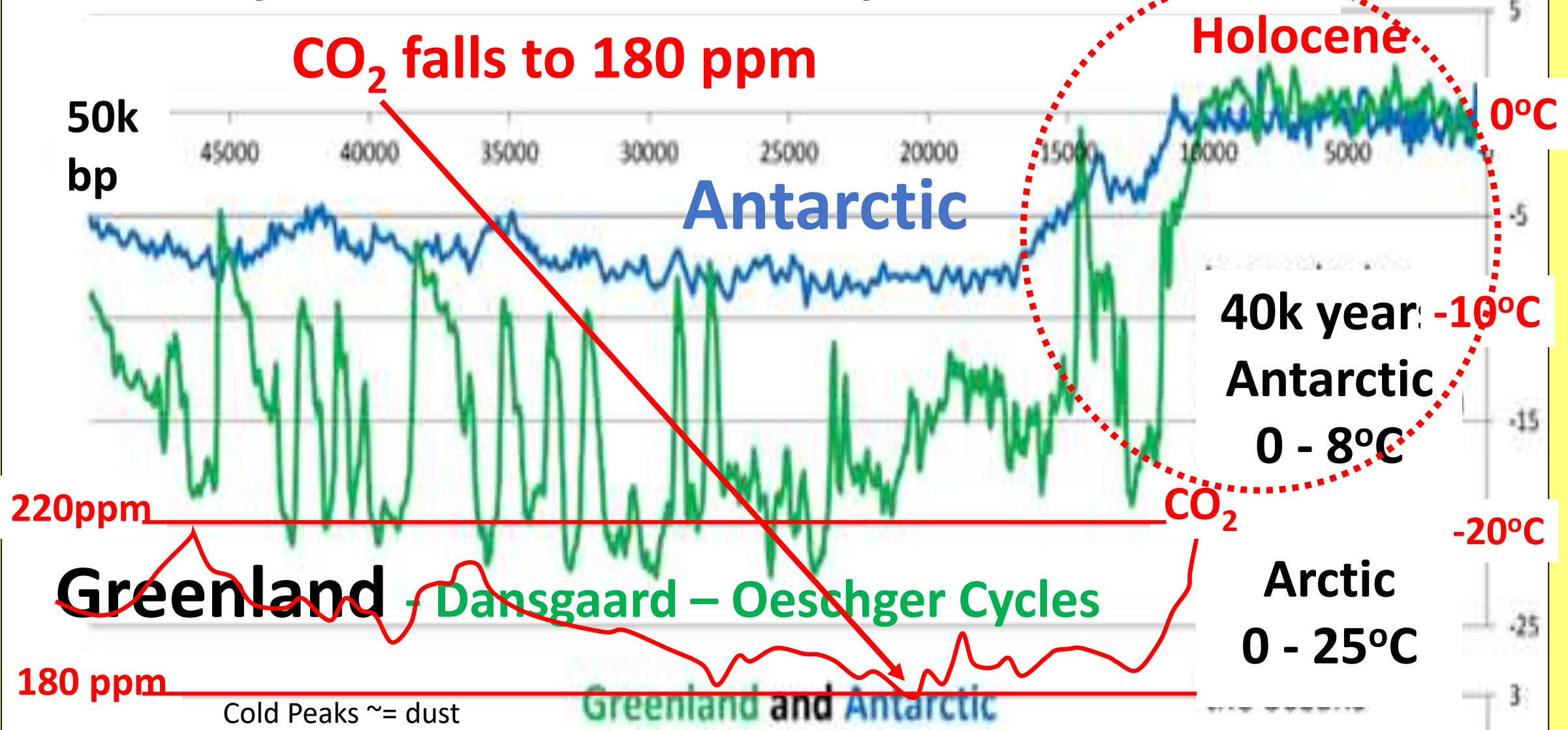
# Burleigh Heads during Eemian Interglacial Sea Level ~10m Highstand



# New Ice age begins: Earth cools; CO<sub>2</sub> static

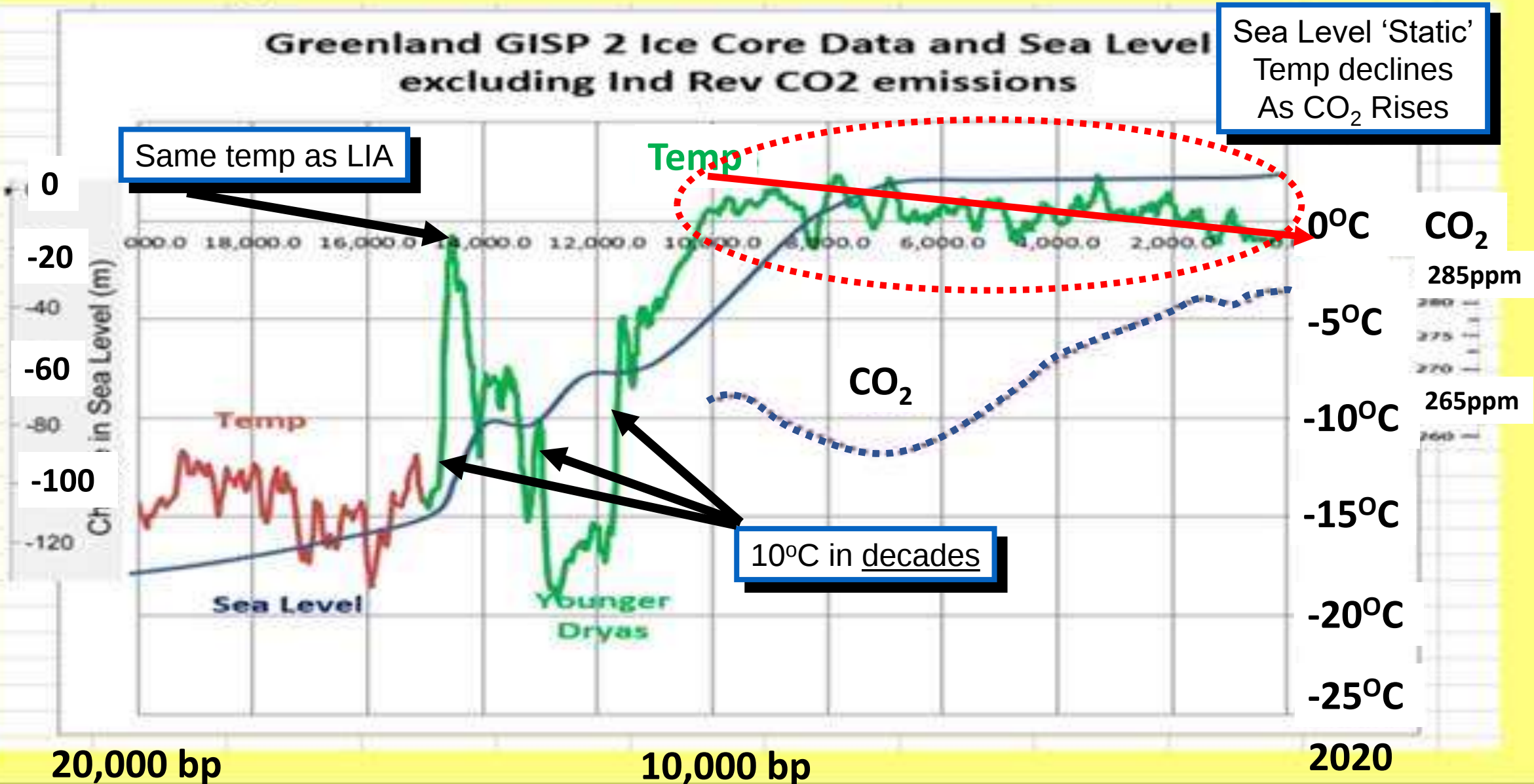


# 50,000 years of Ice Core Temperature data:

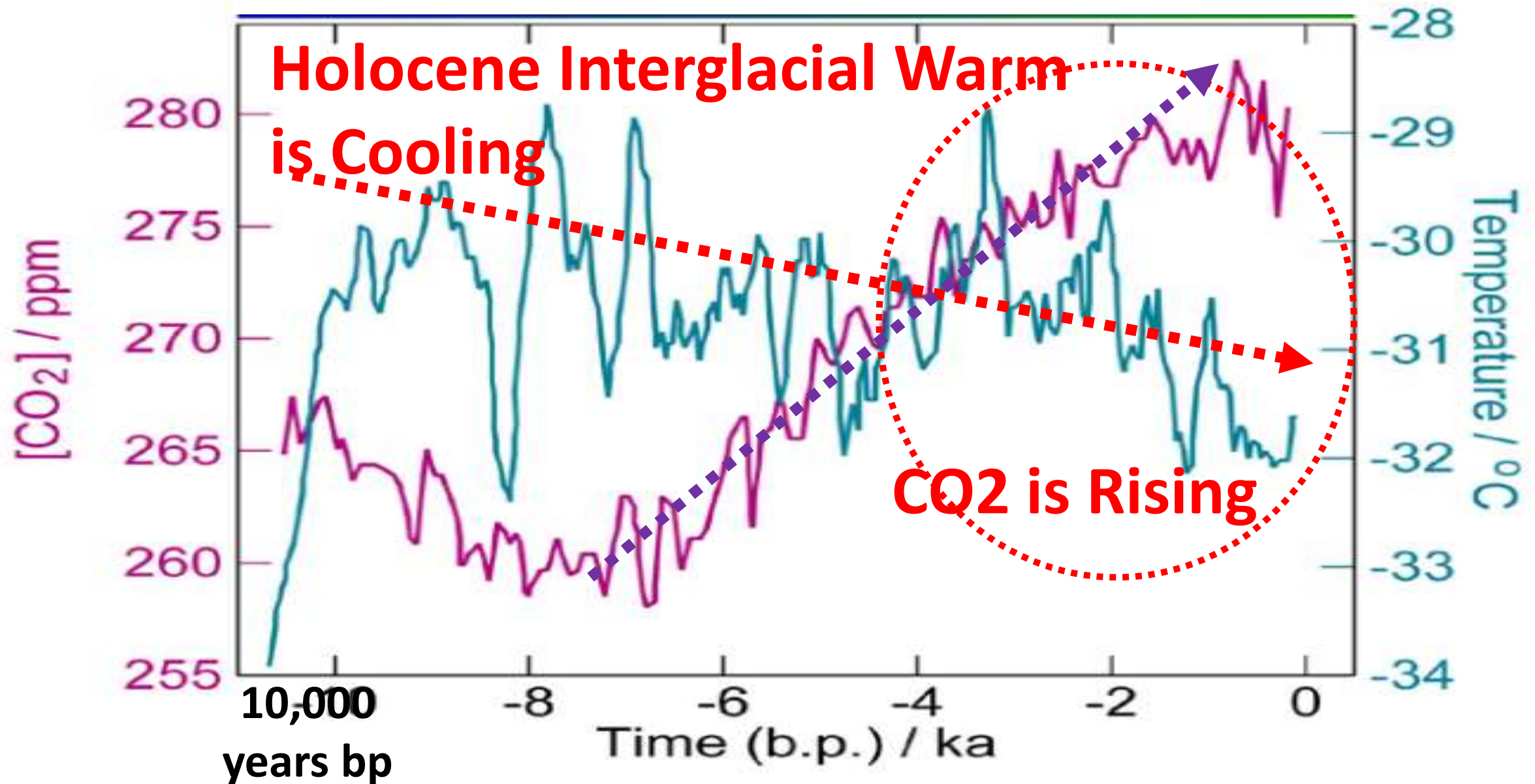


# CO<sub>2</sub> falls then increases, but Temperature doesn't follow

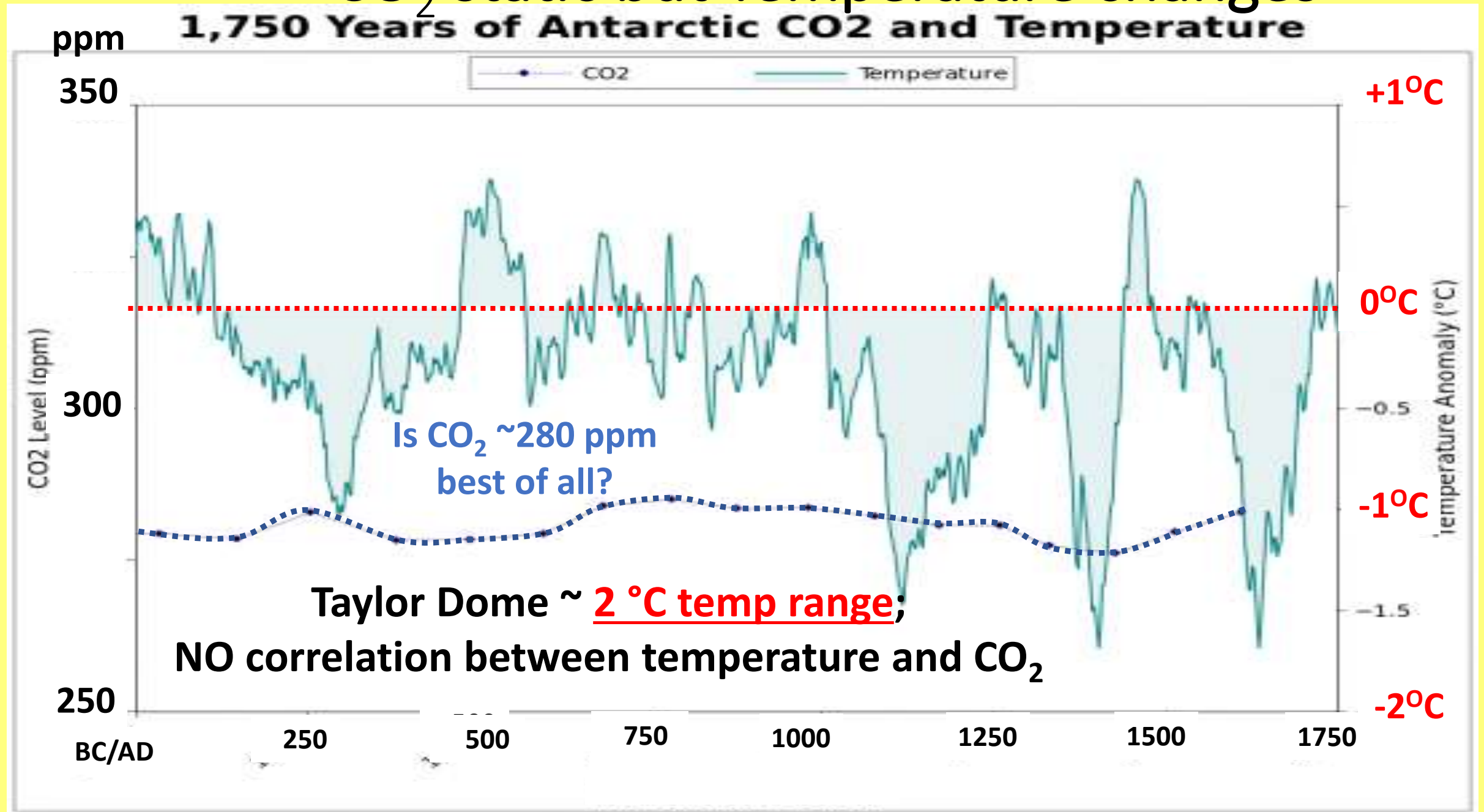
Rising Sea Level post Younger Dryas onlaps coastal greenery which only becomes established when sea level rise slows around 7000



# CO<sub>2</sub> increases 20 ppm but Temperatures declines



# CO<sub>2</sub> static but Temperature changes



# The Swiss Alps - The Great Aletsch glacier



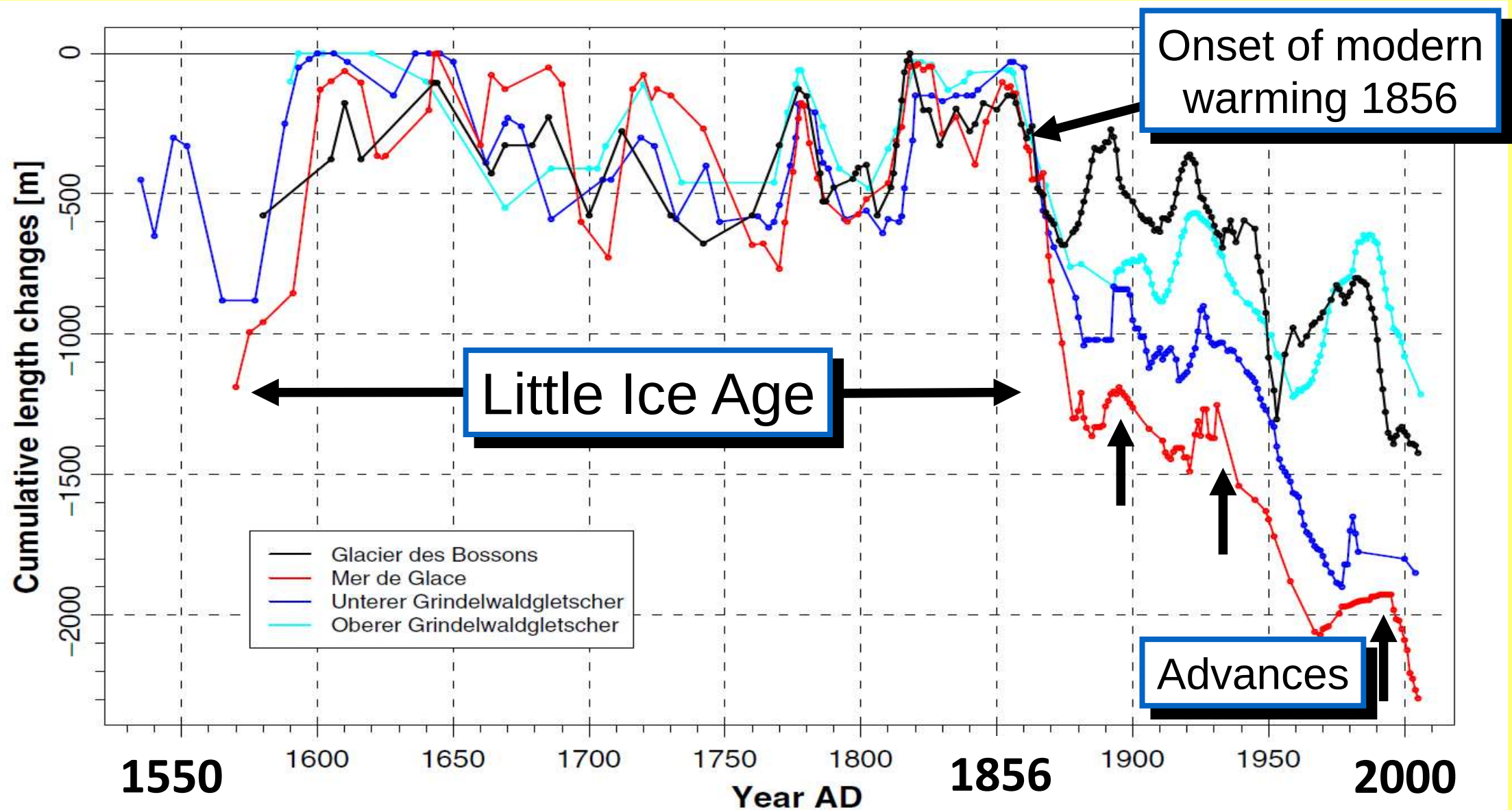
**1856**



**2000**

Holzhauser 2003

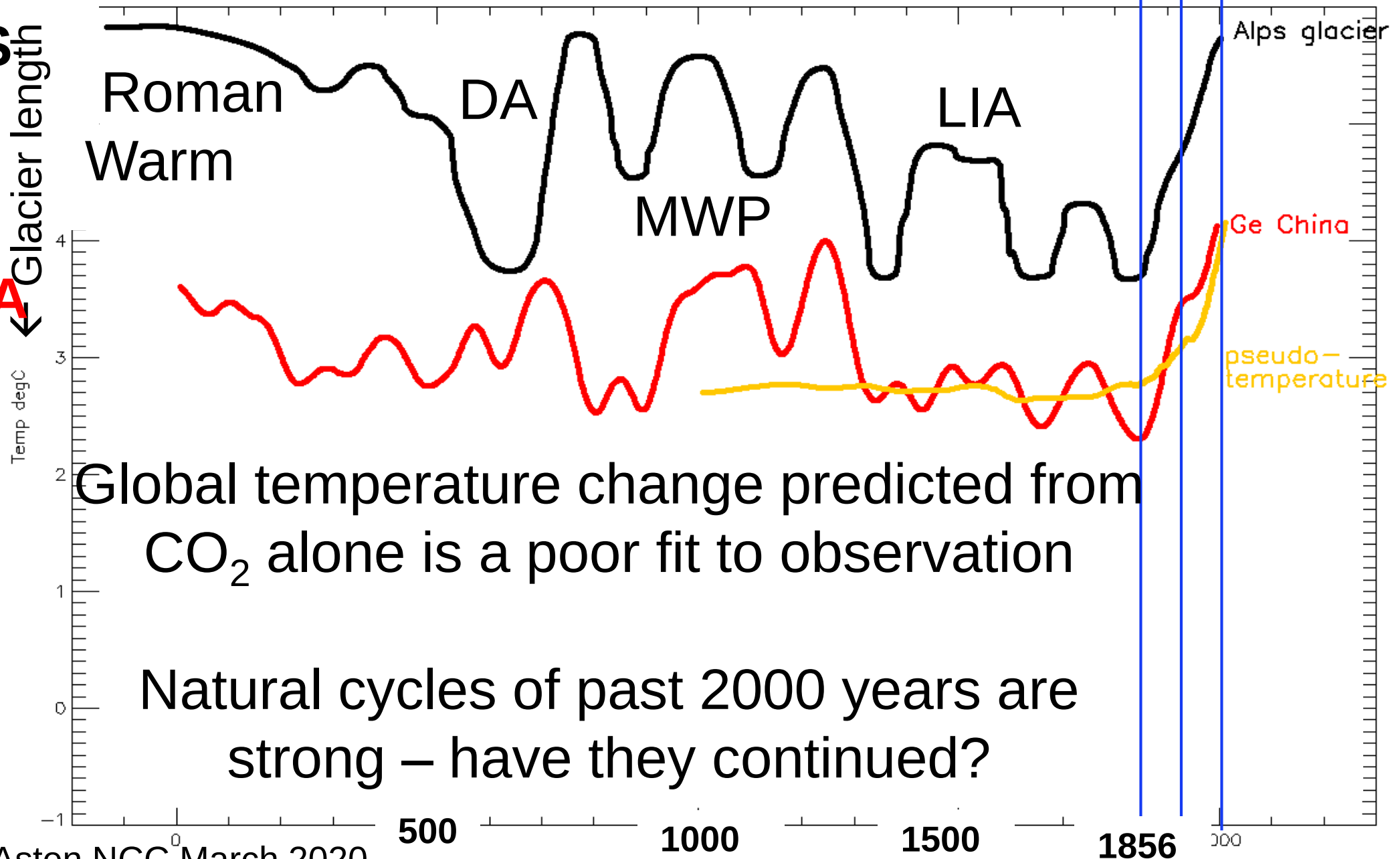
# Alpine Glacier Retreat & Climate Change (Nussbaumer, Zumbahl - 2011)



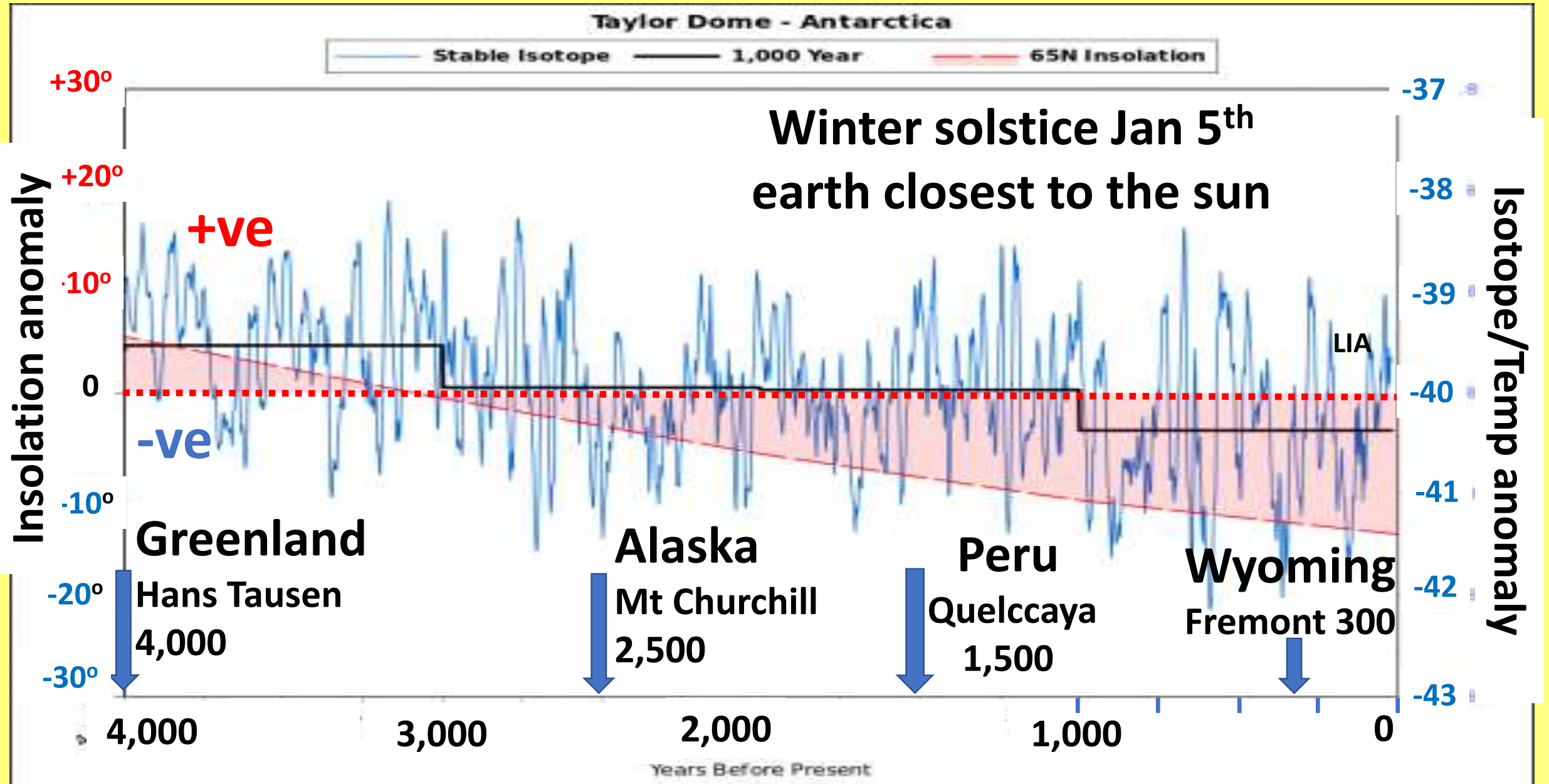
# Warming “attributable” to CO<sub>2</sub> & observed warming

ALPS

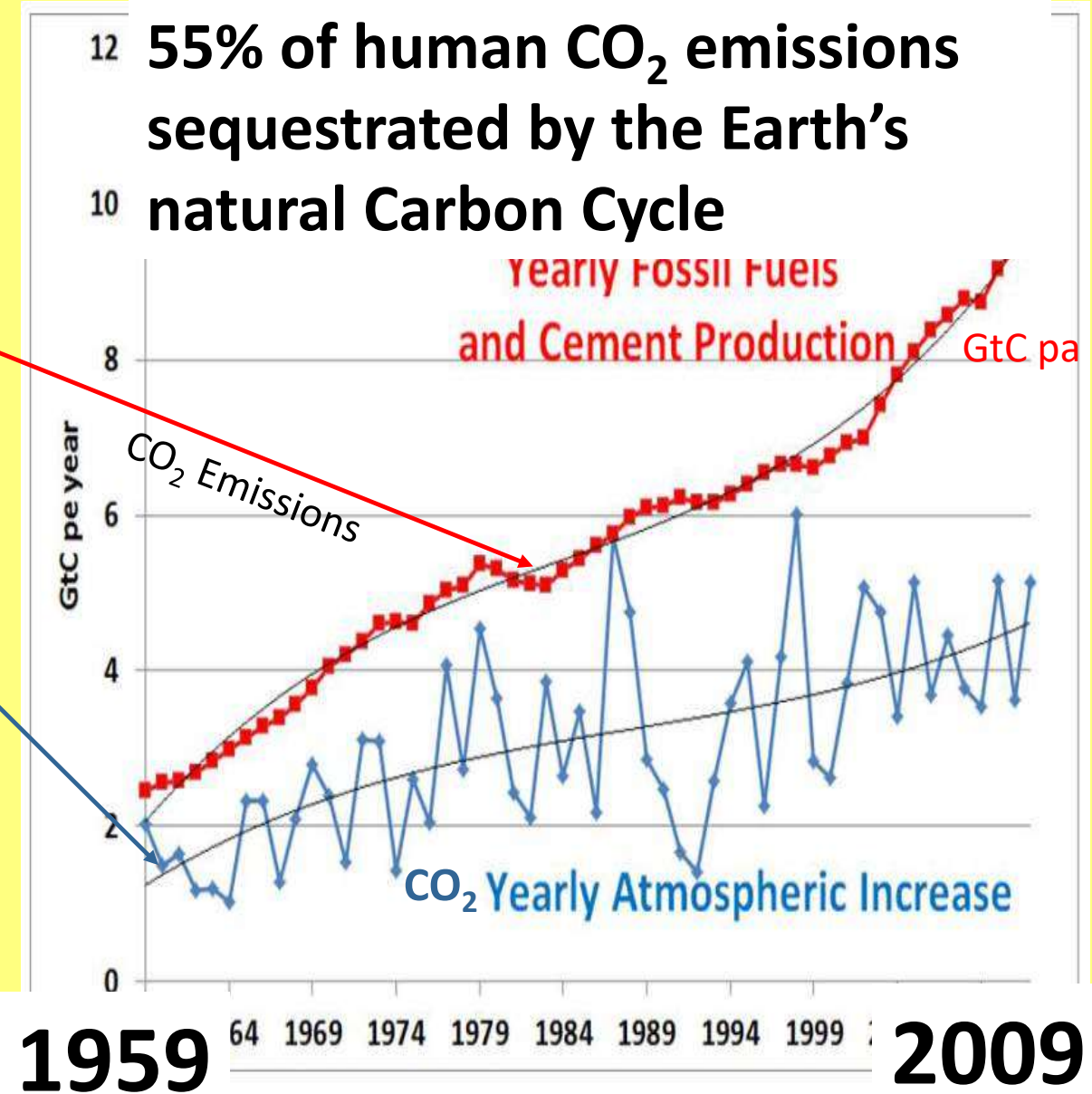
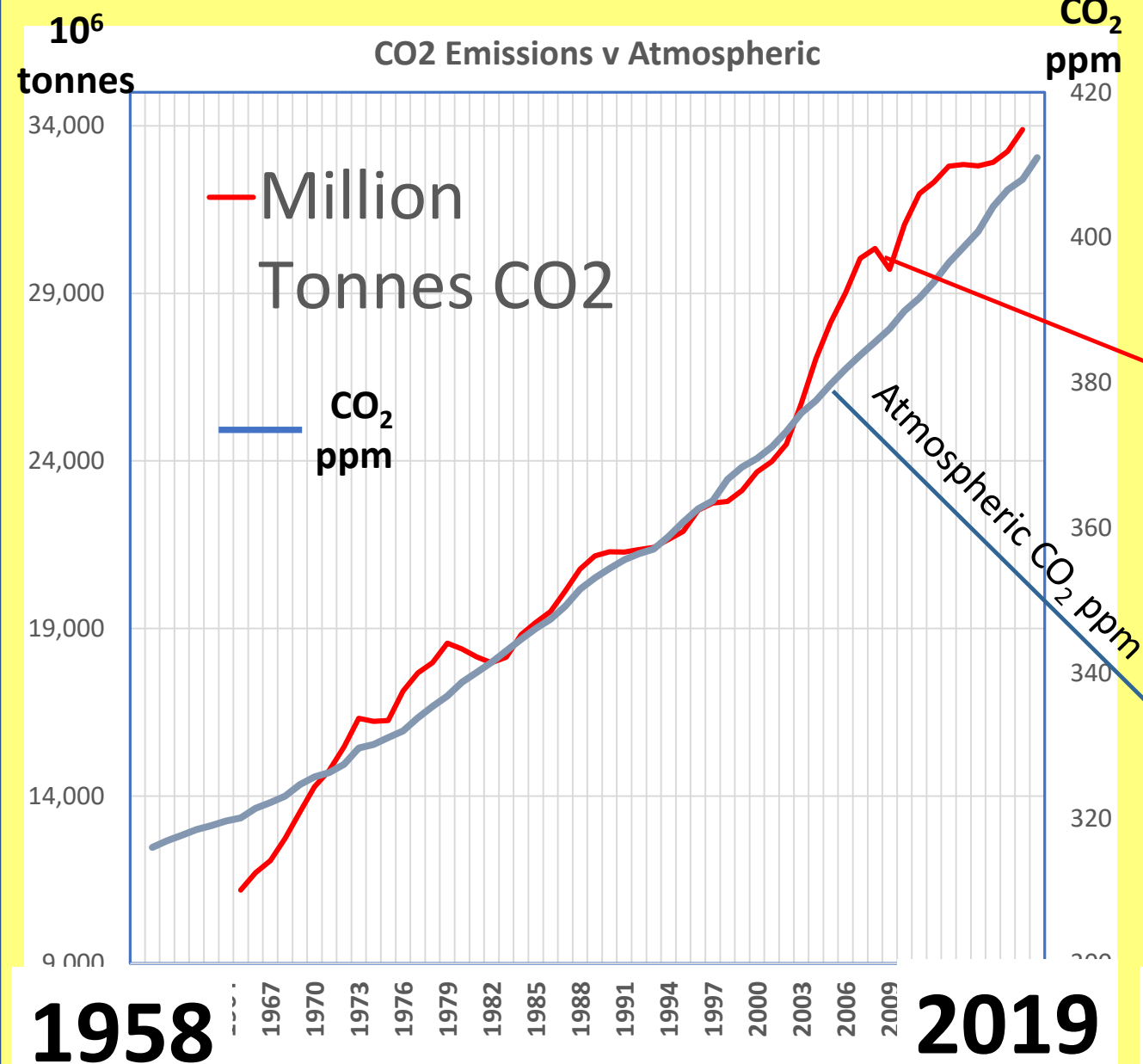
CHINA



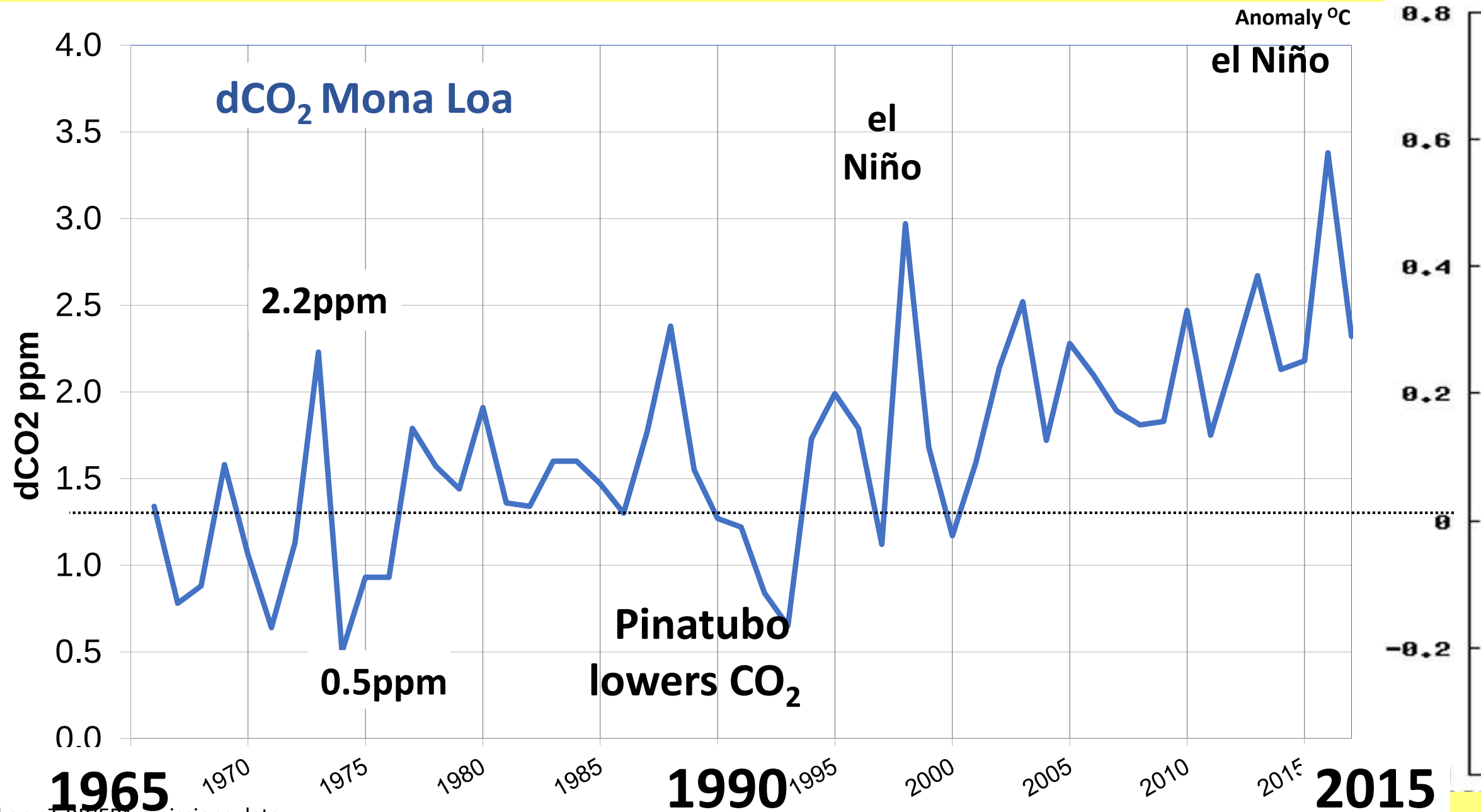
# Young Glaciers advance towards Equator – Global Cooling



**1 ppm atmospheric CO<sub>2</sub> = 2.13 Gt Carbon = 7.8 Gt CO<sub>2</sub>**

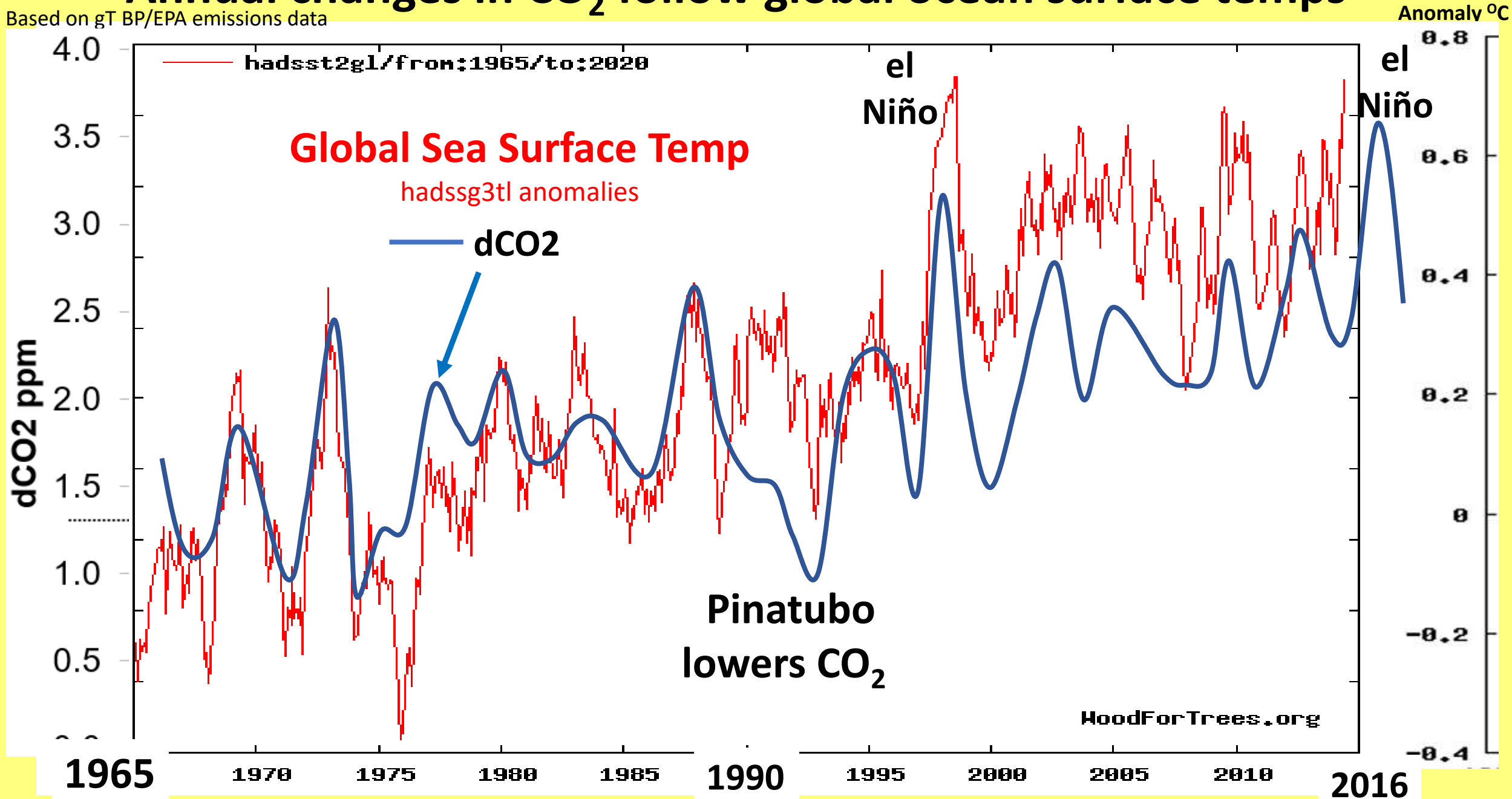


# Annual changes in CO<sub>2</sub> follow global ocean surface temps

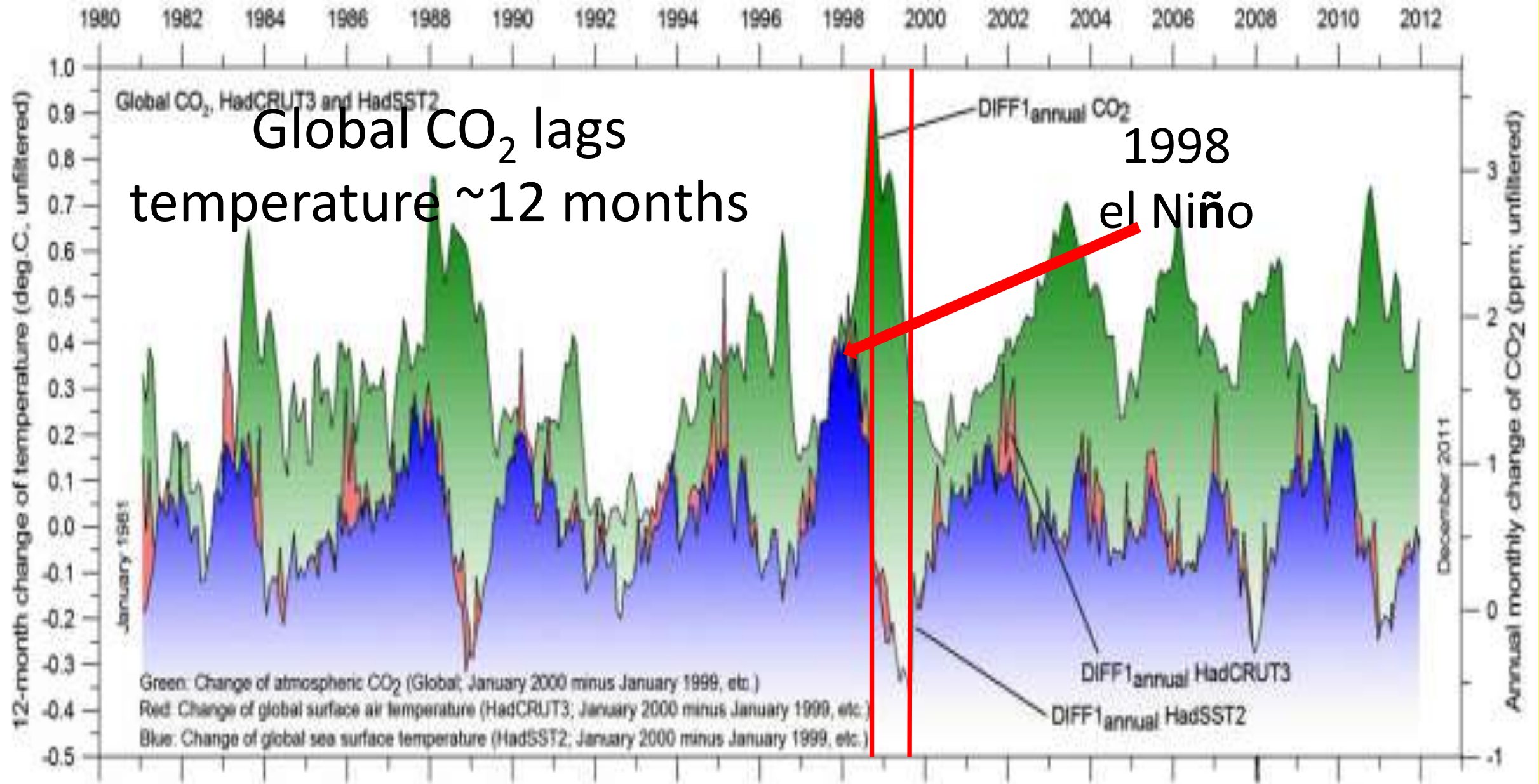


# Annual changes in CO<sub>2</sub> follow global ocean surface temps

Based on gT BP/EPA emissions data



# Rates of change of global sea surface, temperature & CO<sub>2</sub>



# IPCC AGW

(Anthropogenic Global Warming)

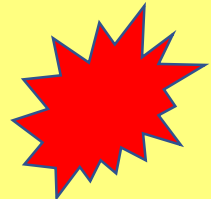
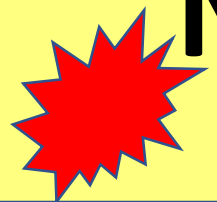
hypothesis claims

Warming is due primarily to human CO<sub>2</sub>  
emissions, so it is all our fault!

**But if CO<sub>2</sub> follows warming -**

**How does it cause climate change?**

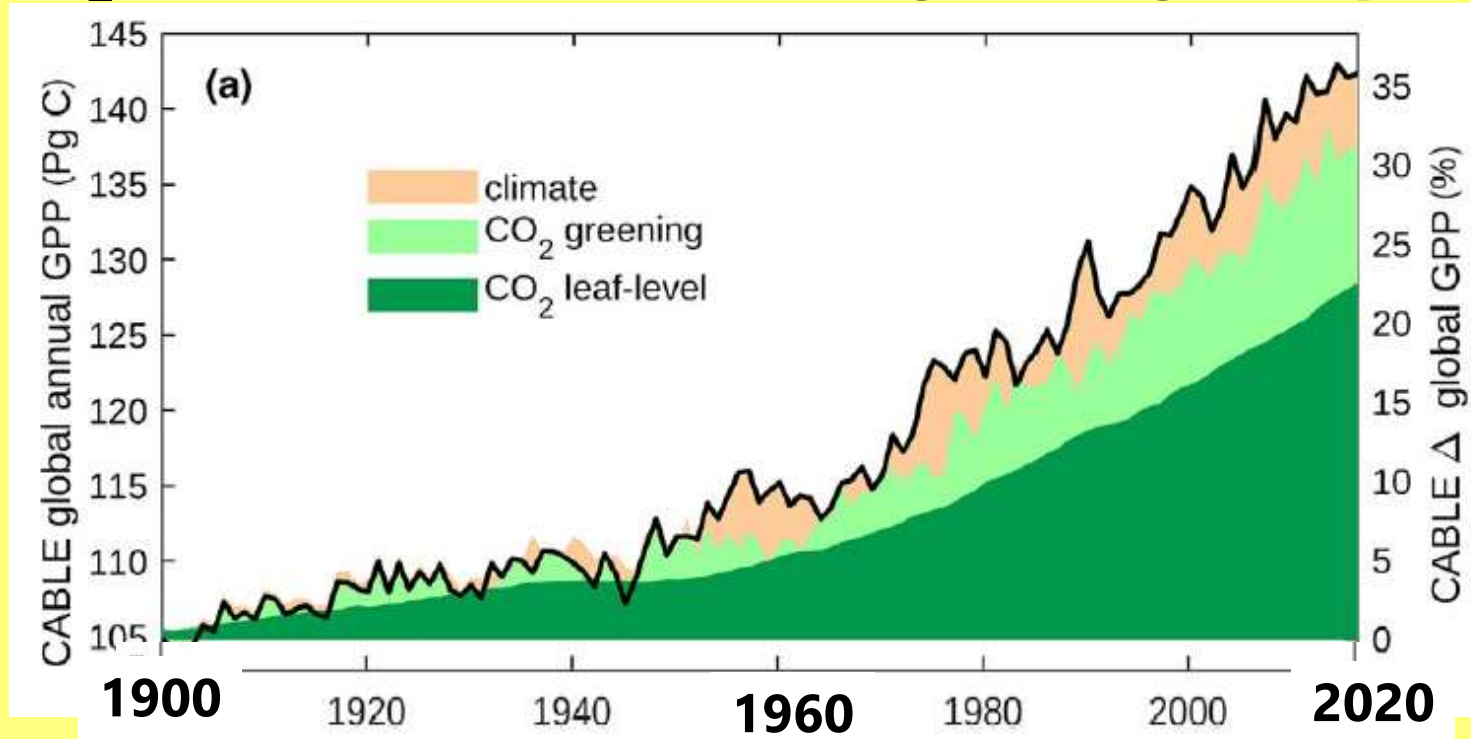
**No need to cut emissions?**



# Benefits of CO<sub>2</sub>



# CO<sub>2</sub> fertilization effect on global gross primary production (GPP).



Dynamic land use (black) attributed to:

- (i) climate effect (orange);
- (ii) CO<sub>2</sub> greening effect (light green);
- (iii) CO<sub>2</sub> leaf-level effect (dark green).

**Average % change in  
rainforest area in Kakadu**

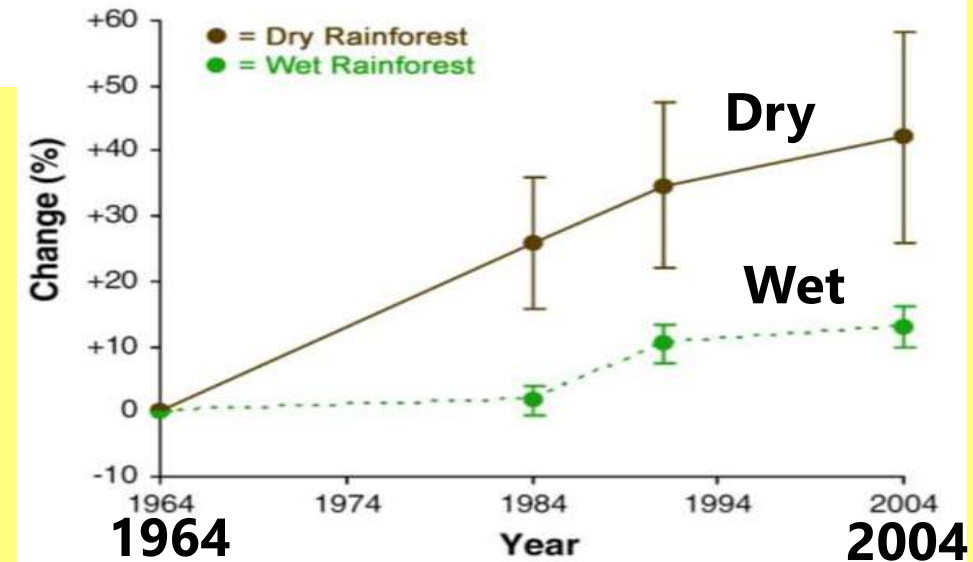
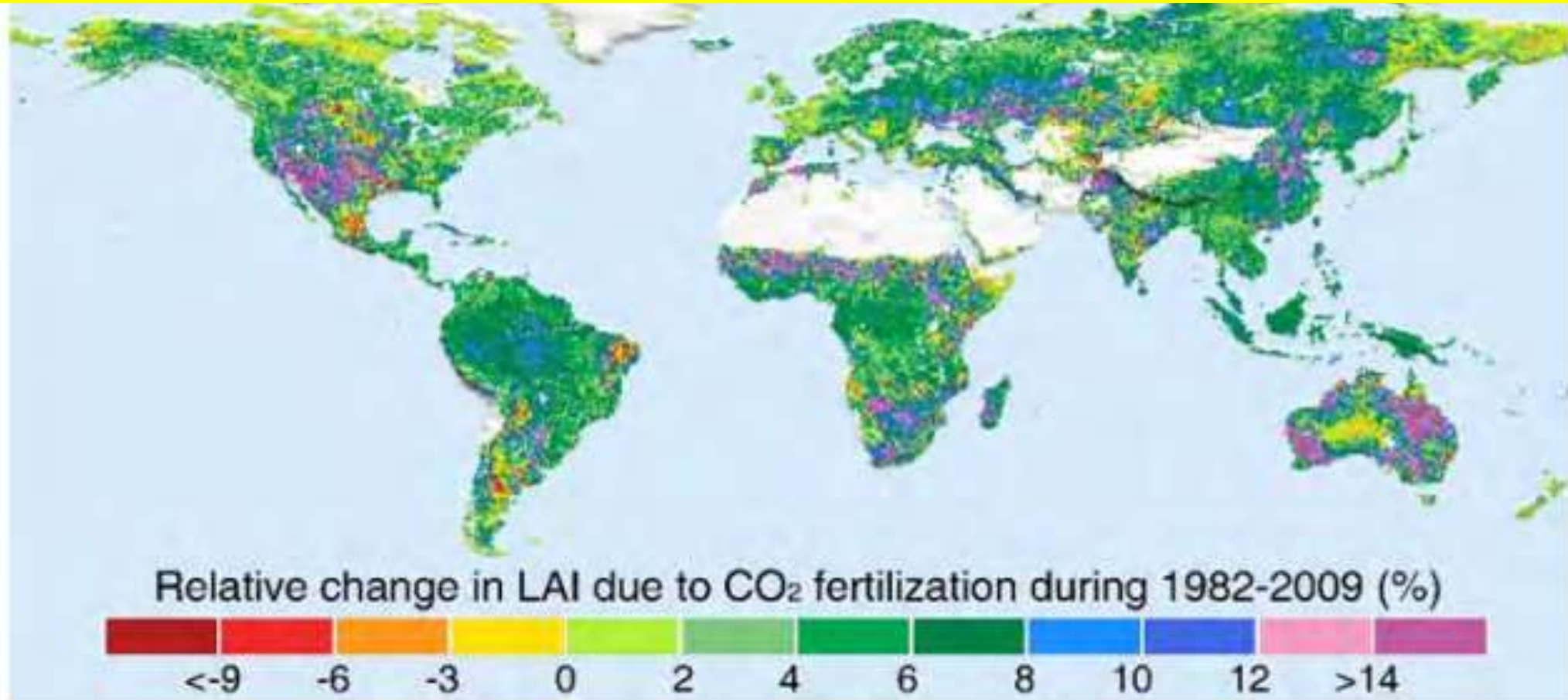


Figure 14. Average percentage change in rainforest area in Kakadu National Park, Northern Territory of Australia, relative to 1964 for dry rainforest (brown line) and wet rainforest (green dashed line). Standard errors are indicated. Adapted from Banfai and Bowman (2006).

# CO<sub>2</sub> Good Stuff: Increase in Leaf Area Index 1982-2009



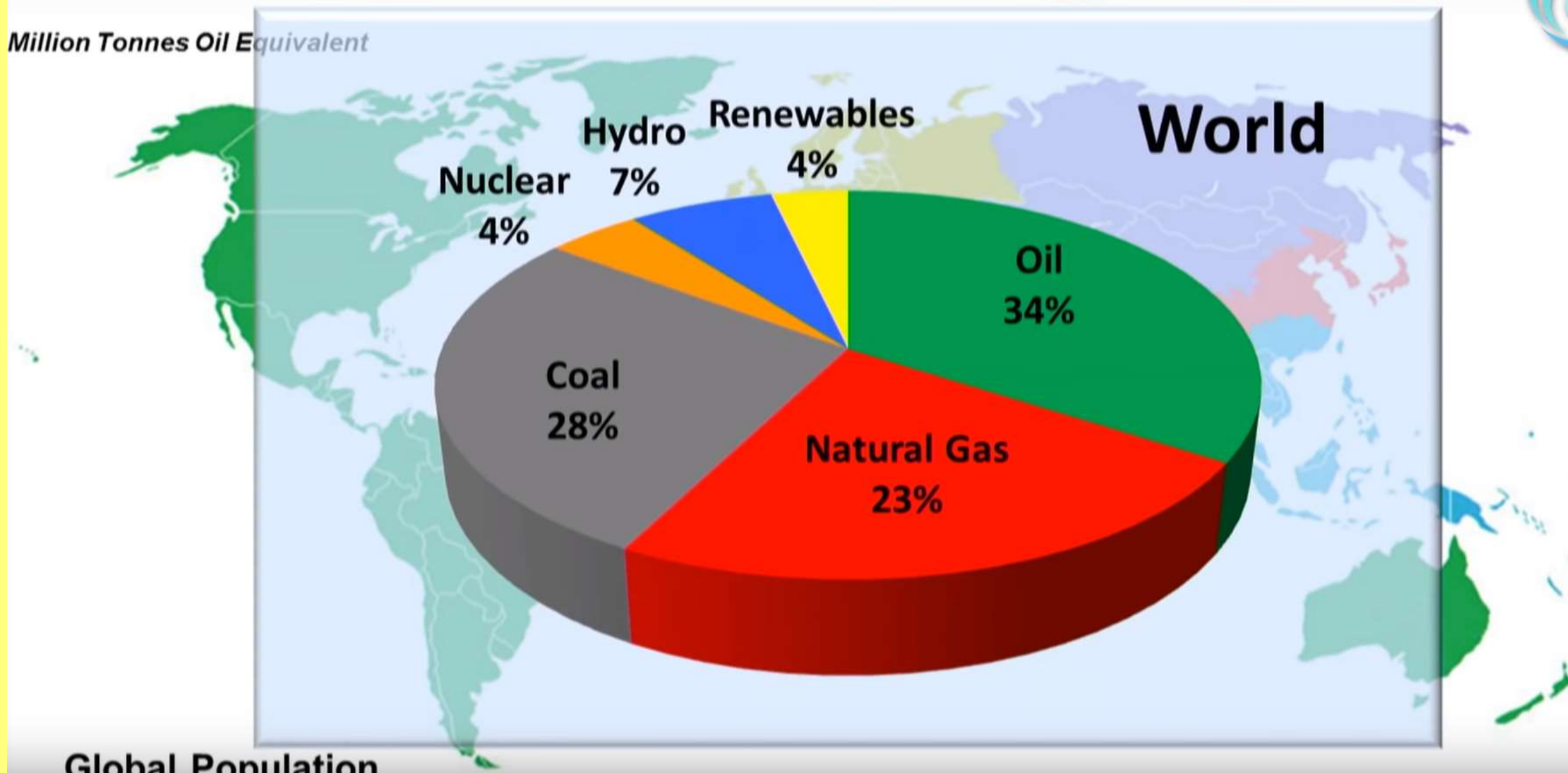
**All thanks to 125ppm increase in CO<sub>2</sub>  
and Global Warming**

**Part 4:**  
**Where to next?**  
**To Cut or Not to Cut**  
**Our CO<sub>2</sub> Emissions?**

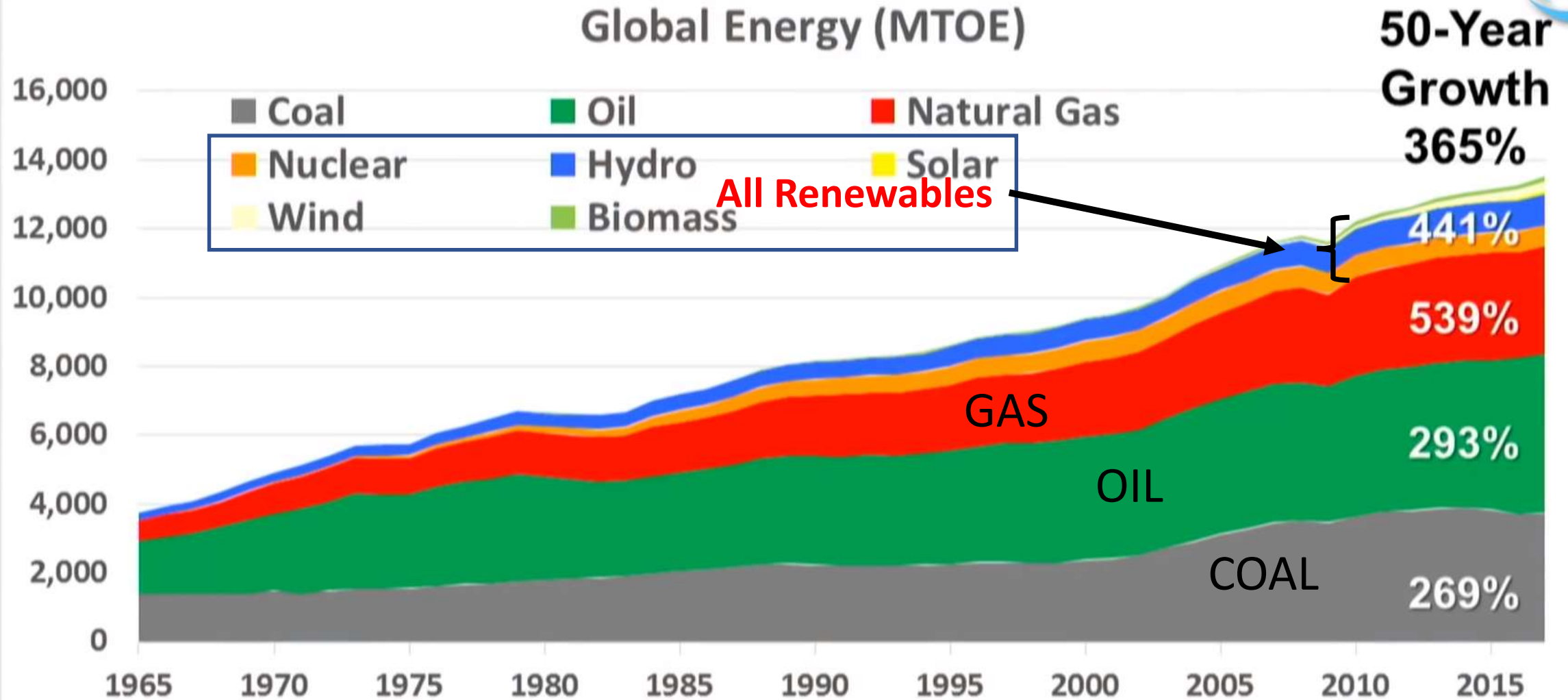
**Consensus Scientists and**  
**Western Governments say Yes**  
**The Data Says No**

# The Global Energy Mix

Million Tonnes Oil Equivalent

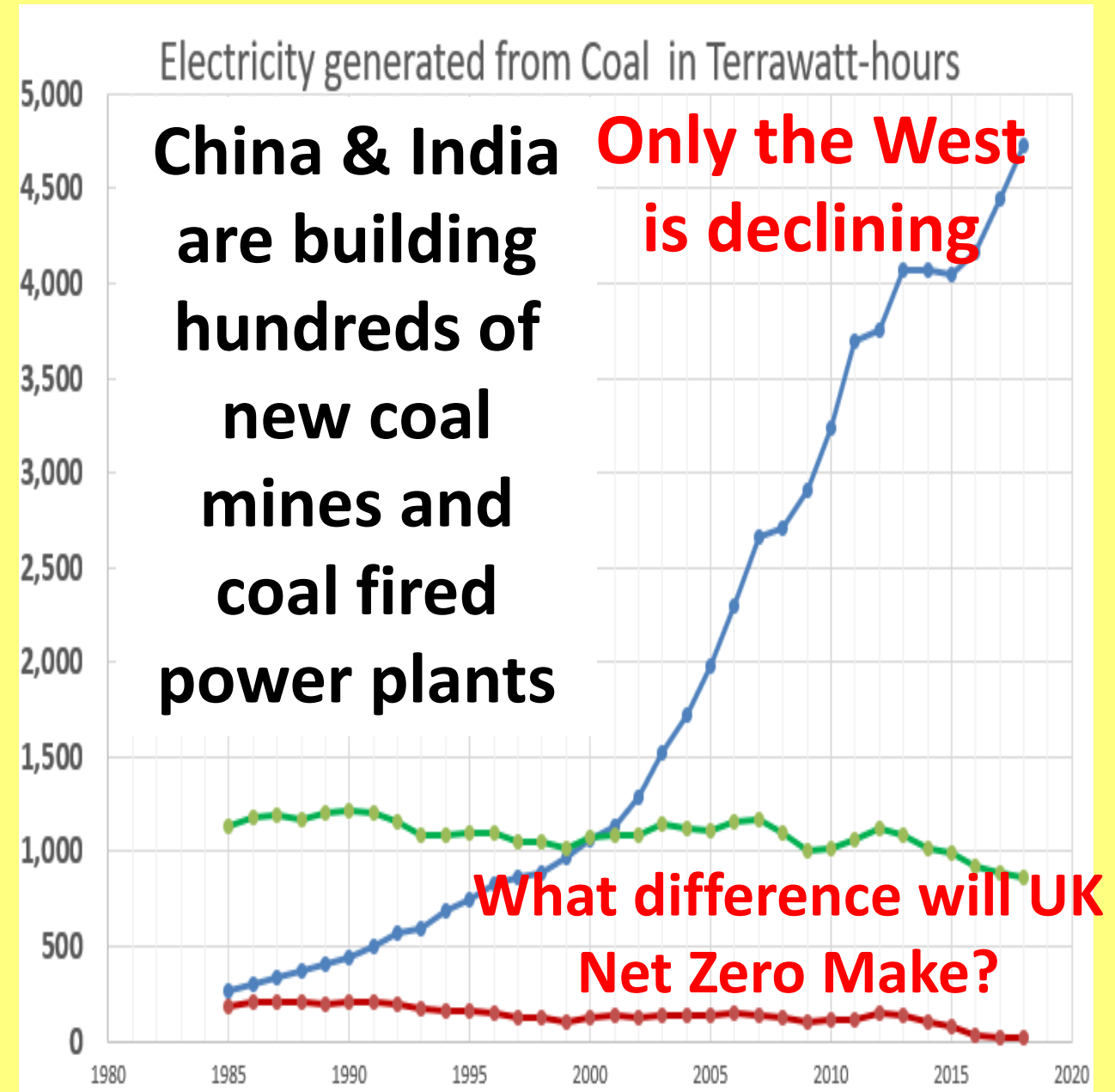
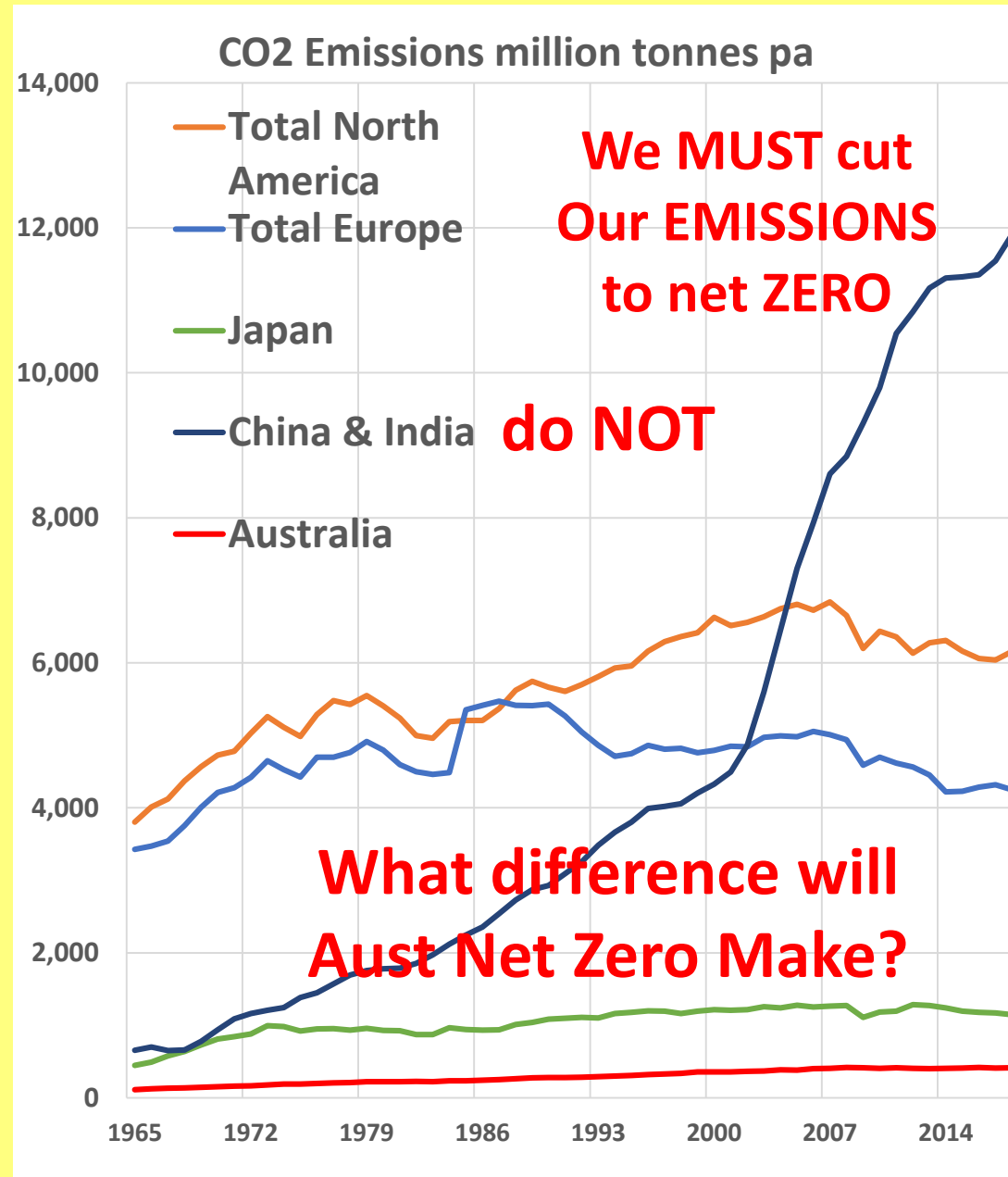


# Global Energy Consumption Mix



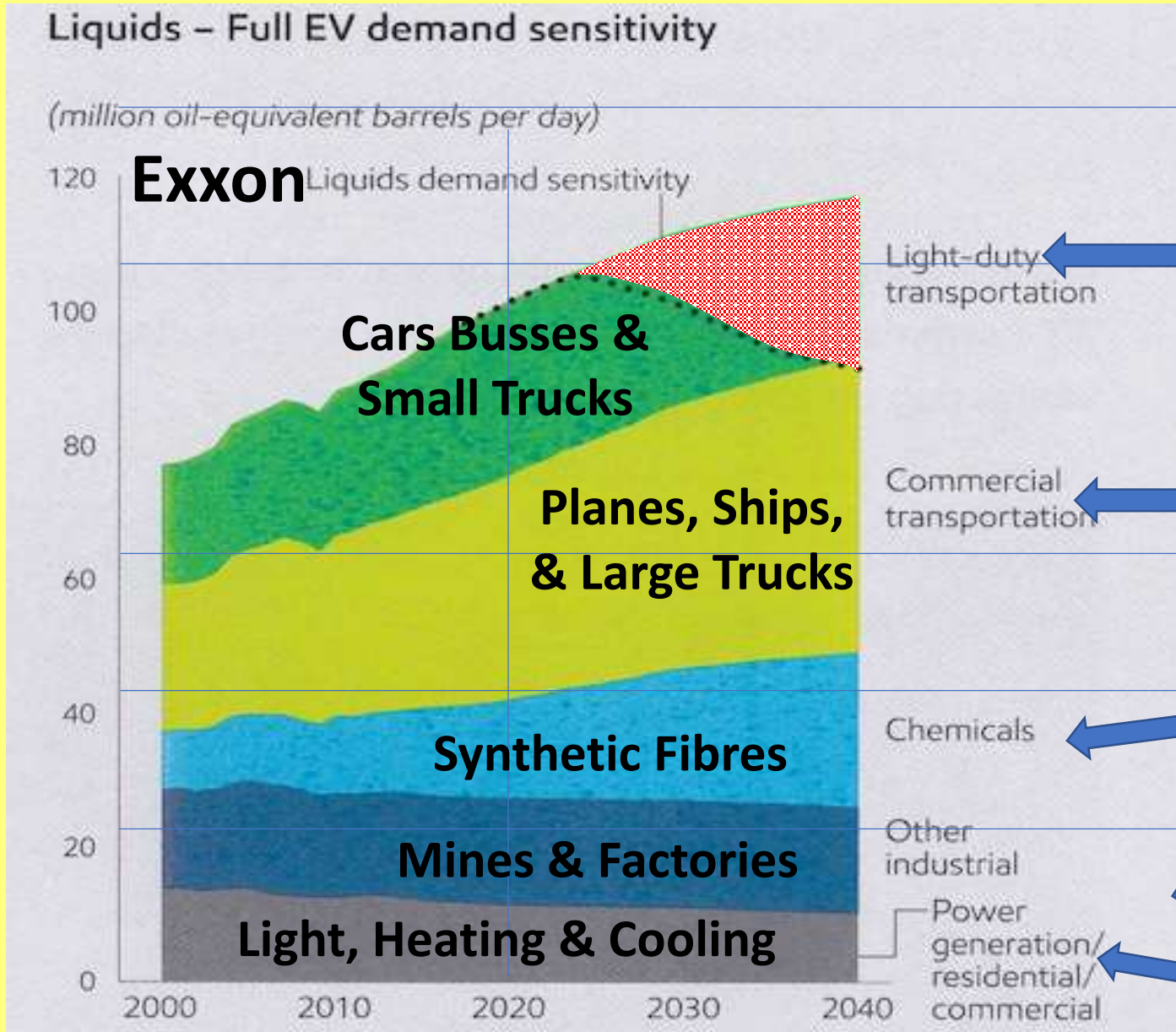
Data: BP Statistical View of World Energy (2018)

# CO<sub>2</sub> Emissions & Coal Fired Power



# How will governments cut emissions?

**IPCC Want Fossil Fuels  
Replaced by 2050  
But with what?**



**100% Electric => 600  
million EVs or horses?**

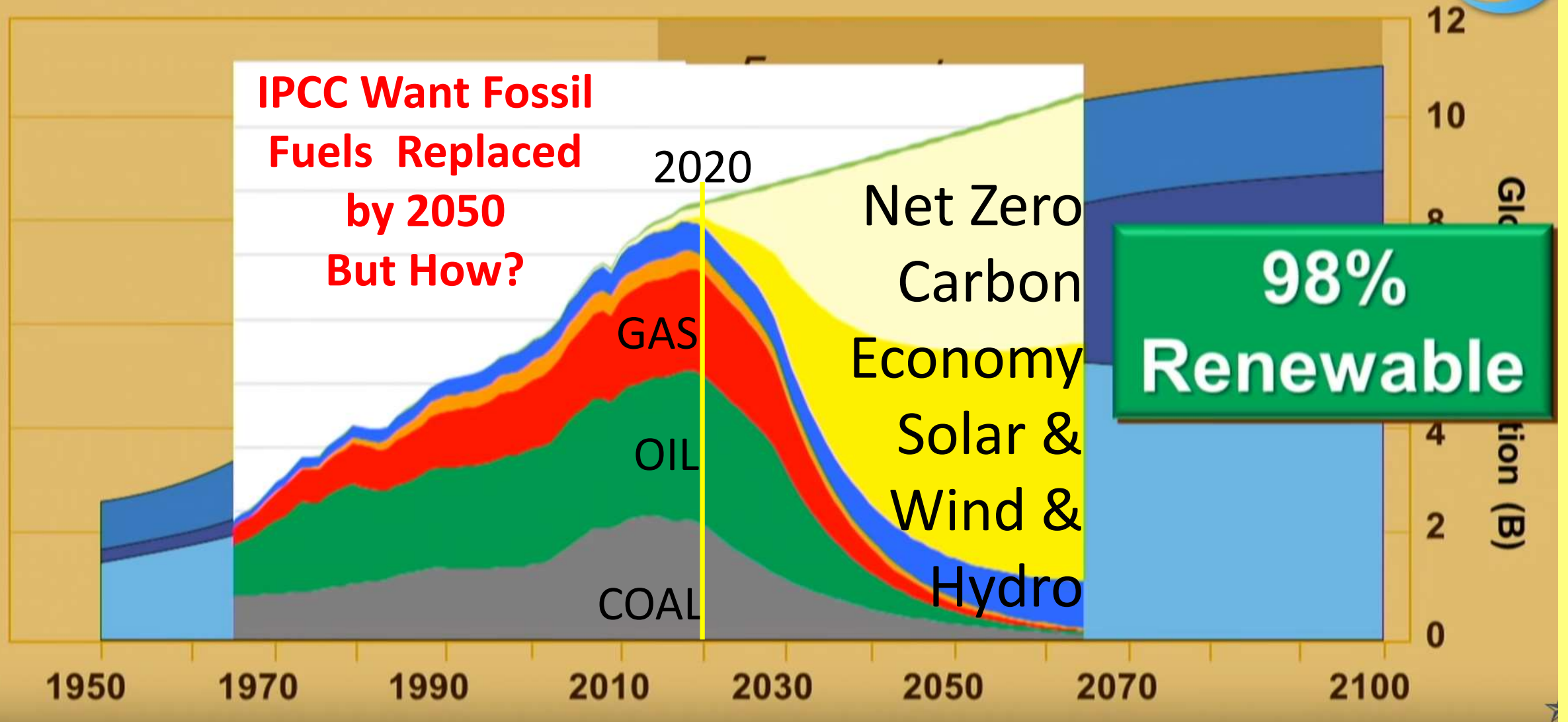
**Electric Planes,  
Ships and Battery  
Powered Heavy  
Duty Vehicles?**

**Cotton, Jute &  
Cannabis?**

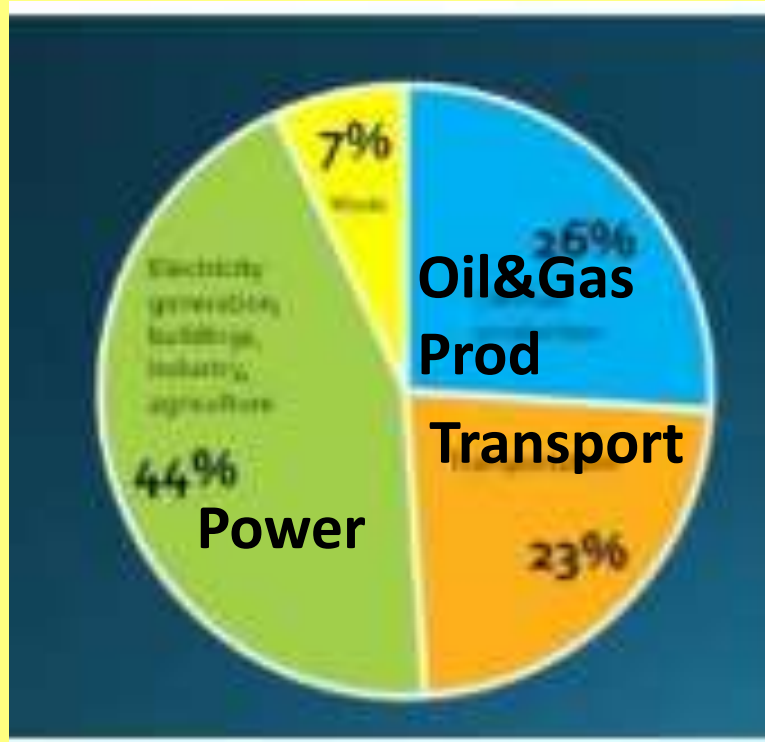
**Battery driven Mining  
& Manufacturing**

**Wind Solar  
& Nuclear**

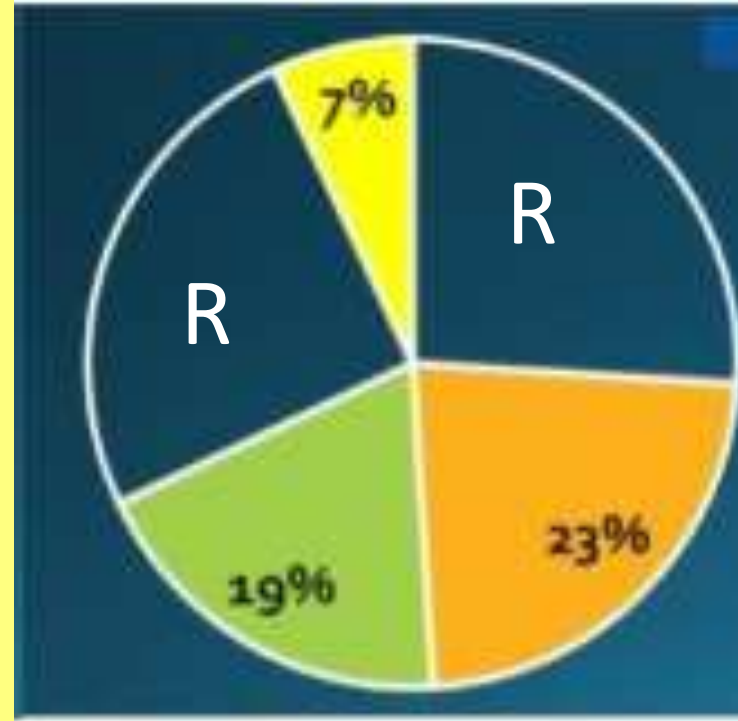
# Population and Energy



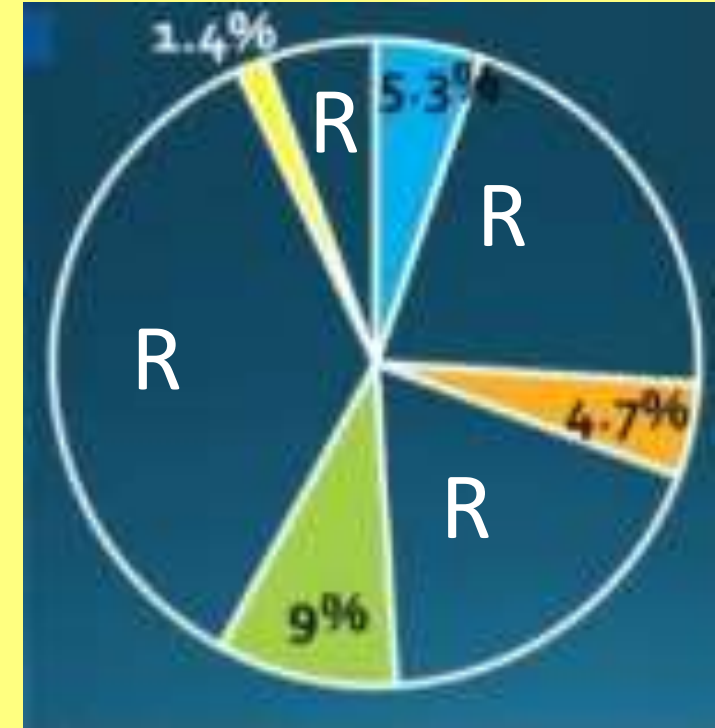
## Canada's Current Energy Mix



**50% down by 2050**



**80% down by ....?**



**Western Governments will kill their industry**



**R = Renewables**  
**Is it even Possible technically?**

Scott Tinker - At the Crossroads Energy & Environment Summit



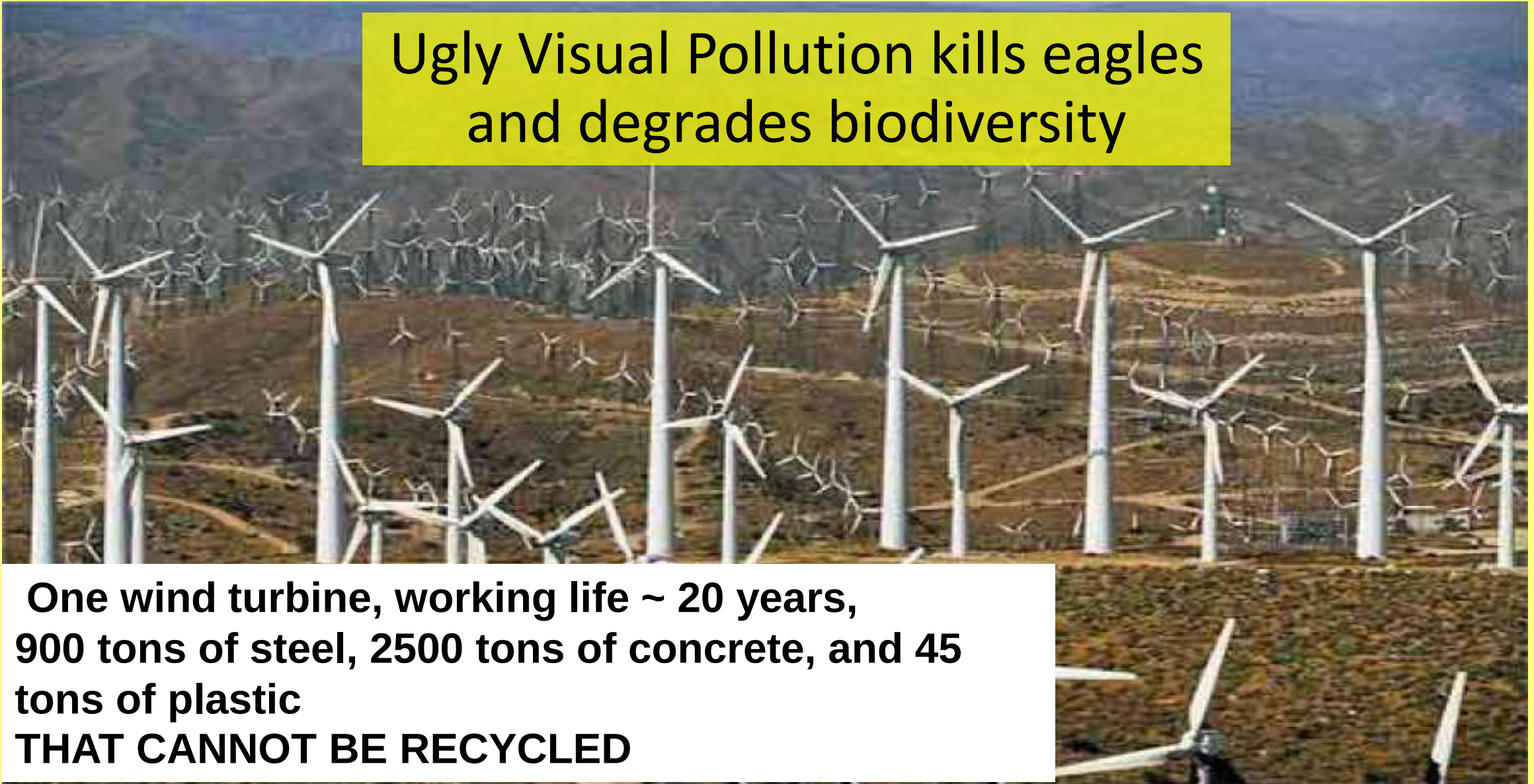
Work but no  
Bio Diversity



*Eg of size - Spotsylvania Solar Energy Center 500-MW on 6,350 acres*

# Harvard Study Finds Wind Turbines Warm The U.S.

Ugly Visual Pollution kills eagles  
and degrades biodiversity



**One wind turbine, working life ~ 20 years,  
900 tons of steel, 2500 tons of concrete, and 45  
tons of plastic  
THAT CANNOT BE RECYCLED**

83.5m blade for 7 MW system in 2016.... to large to recycle

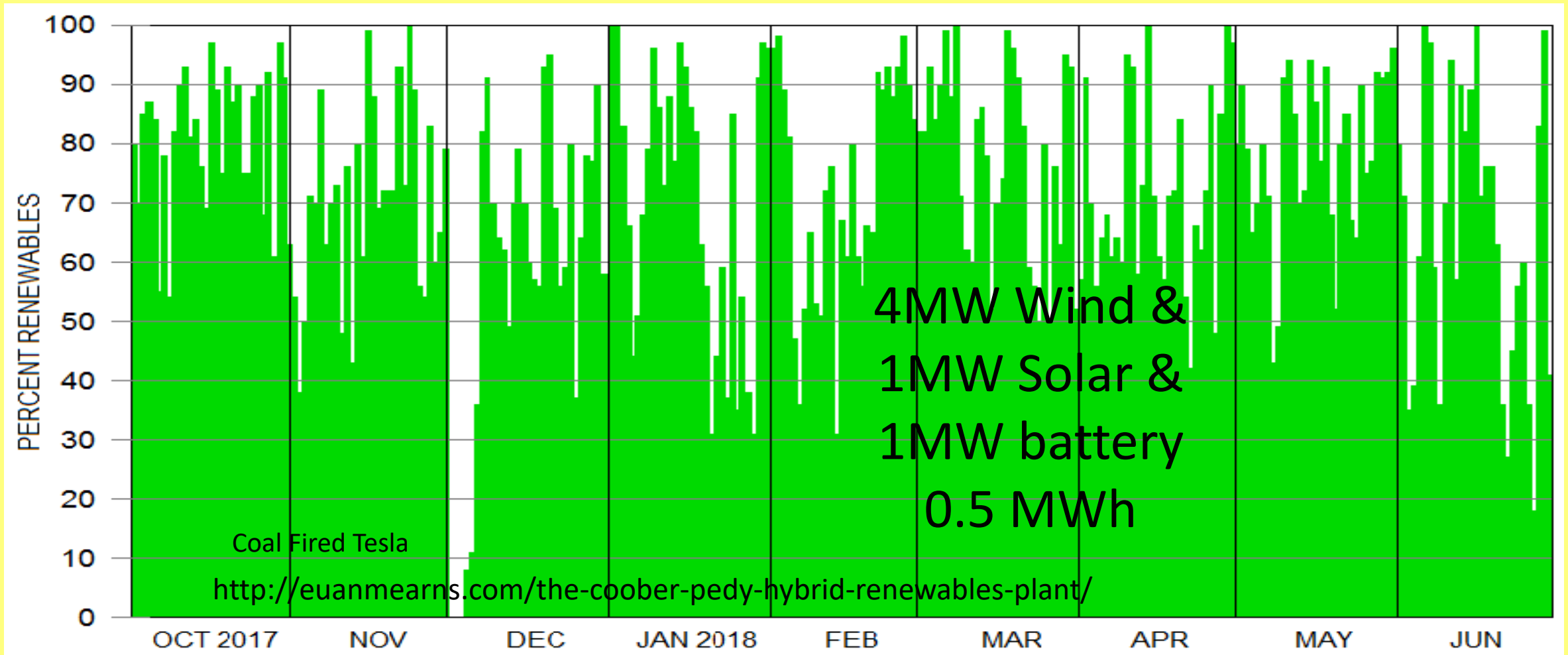


2020 blade waste 50,000 tons; by 2034 it will be 225,000 tons

**Coober Pedy 700kW Diesel Hybrid initial cost \$56 million**

**Provides 70% of demand**

**What is Missing? diesel/coal/gas/batteries**



**Population 1700 = \$33,000 per person**

**Storage 0.5 MWh:100% - but needs 700 MWh**

Scott Tinker - At the Crossroads Energy & Environment Summit

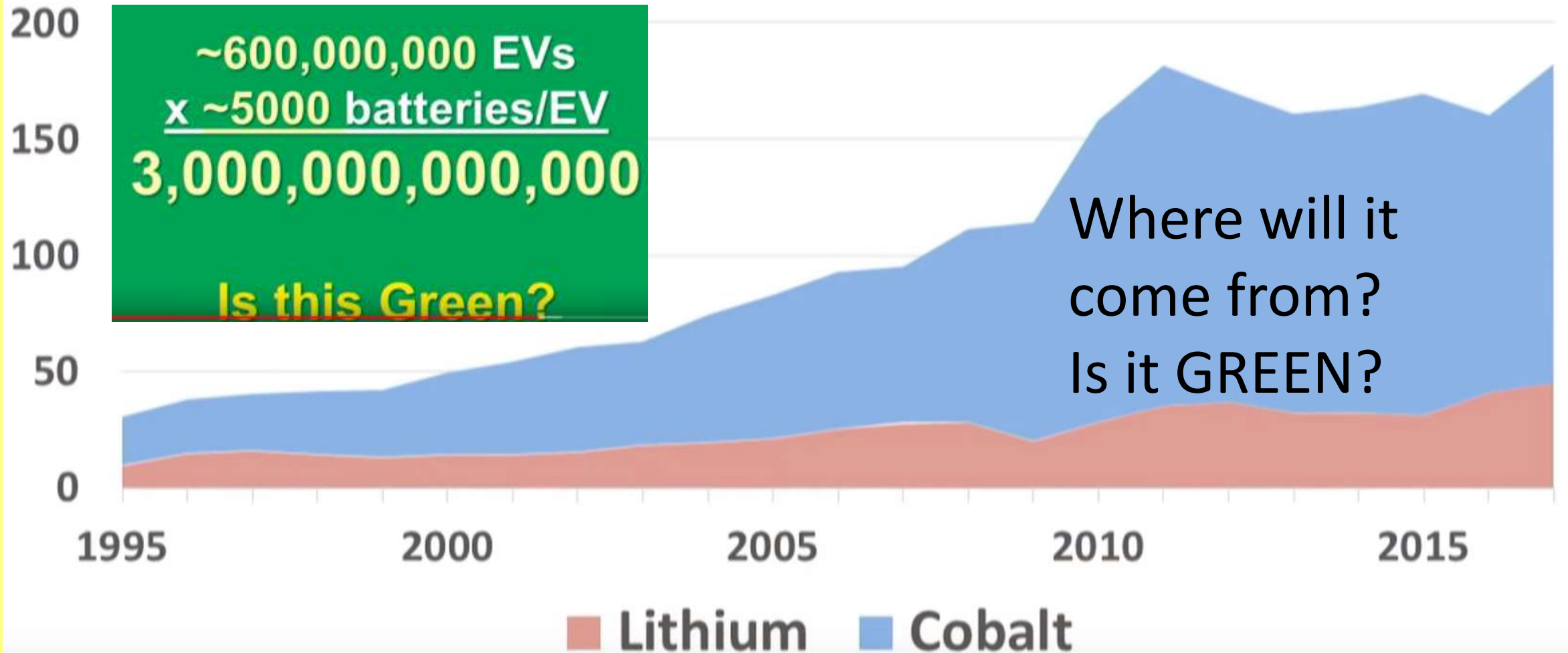
## ELECTRIC CAR RUNNING ON DIESEL

EV's HAVE  
~7,200 BATTERIES  
AND CAN'T BE TOWED  
WHEN FLAT



# Battery Mining

Lithium and Cobalt Production (Thousand Tonnes)



# Copper Mining



Montana Resources. Continental Pit. Butte Mining District.

Can this be done  
with battery driven  
earth movers?

*Photo: Scott W. Tinker*

~~1200' deep. ~ One square mile. ~ 50,000 tons of ore per day~~

# Footprint of Gas Fracking Wellhead & Pipeline

Gas Well-Head



Buried Pipeline After Restoration



AND ...Natural Gas Provides *Energy Day and Night*

- **The Good Stuff: Fossil Fuels**
  - Concentrated, cheap, reliable energy
  - Increase sustainability & reduce poverty & death
  - CO<sub>2</sub> emissions increase global vegetation on land & sea
  - Increase health & wealth & slow population growth
- **The Bad Stuff: Renewables**
  - Are intermittent & very expensive
  - Increase living costs and are not sustainable
  - Need batteries made from UNOBTANIUM
  - And non-commercial Fossil Fuel Back-up Power
  - Real pollution funding is swept off the table



**Last Saturday was Earth Day  
Did you switch off everything  
for an hour?**

**Every hour is Earth Hour in North Korea**

**This is the end  
game of the net  
zero emissions  
gangsters**



<https://clintel.org/news/>



<https://blog.friendsofscience.org>

Australian Wildfire  
Facts Blocked By IFCN  
Poynter and facebook

[clintel.org/news/](https://clintel.org/news/)



<https://saltbushclub.com/about/>



<https://inconvenientfacts.xyz>

# Extinction Rebellion's Aim

To build structure,  
community and test  
prototypes in preparation  
for  
the coming structural  
collapse of the regimes of  
western 'democracies'.





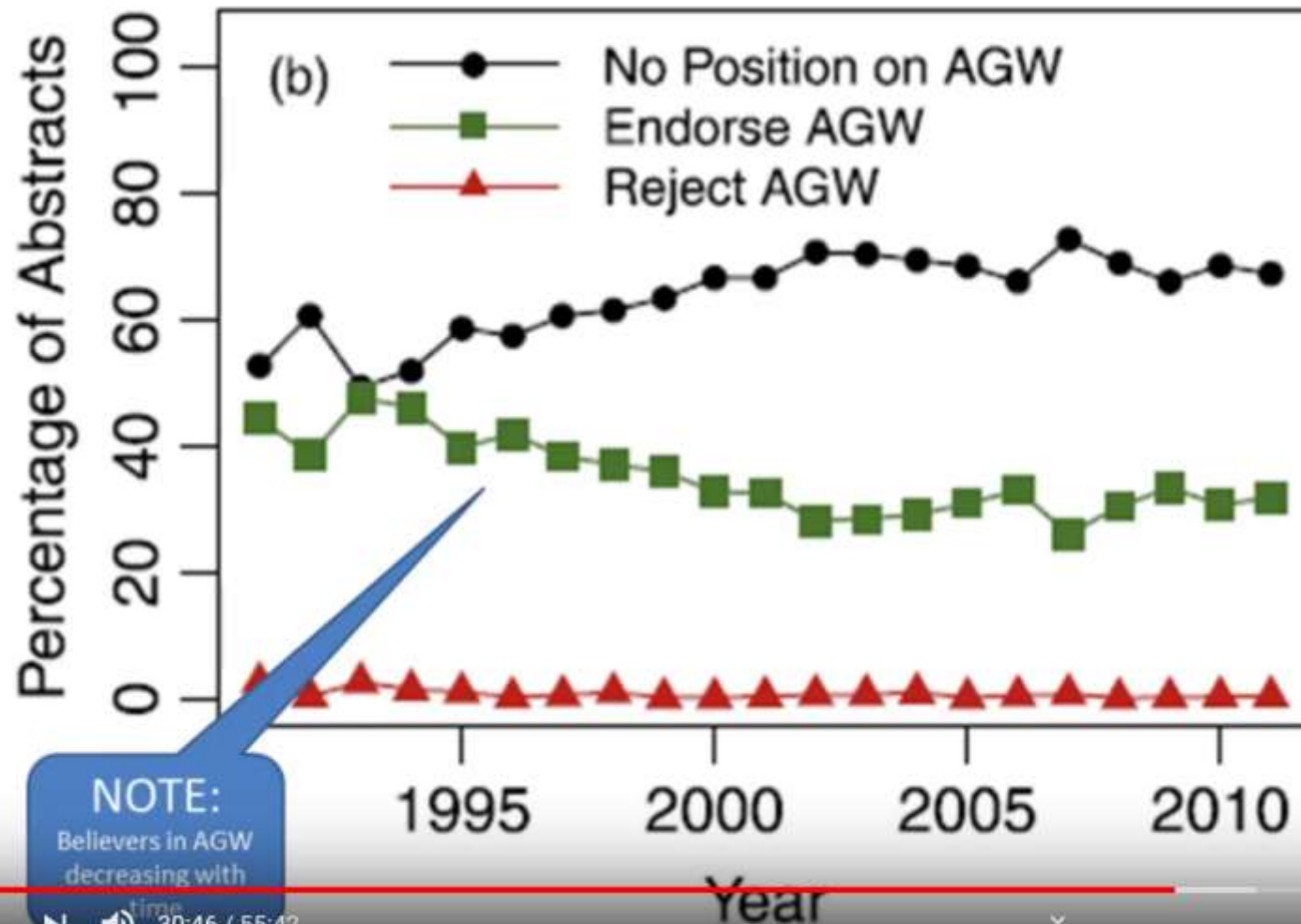
**Real Pollution needs HELP: ... Thank You**

## Electric School bus or diesel

It cost US\$13,000,000 for 15 buses, plus  
\$100,000 for recharging stations = \$13.1 million

\$873,333 per electric bus v \$110,000 for diesel

# How did Cook calculate their 97% ?



11,944 abstracts reviewed

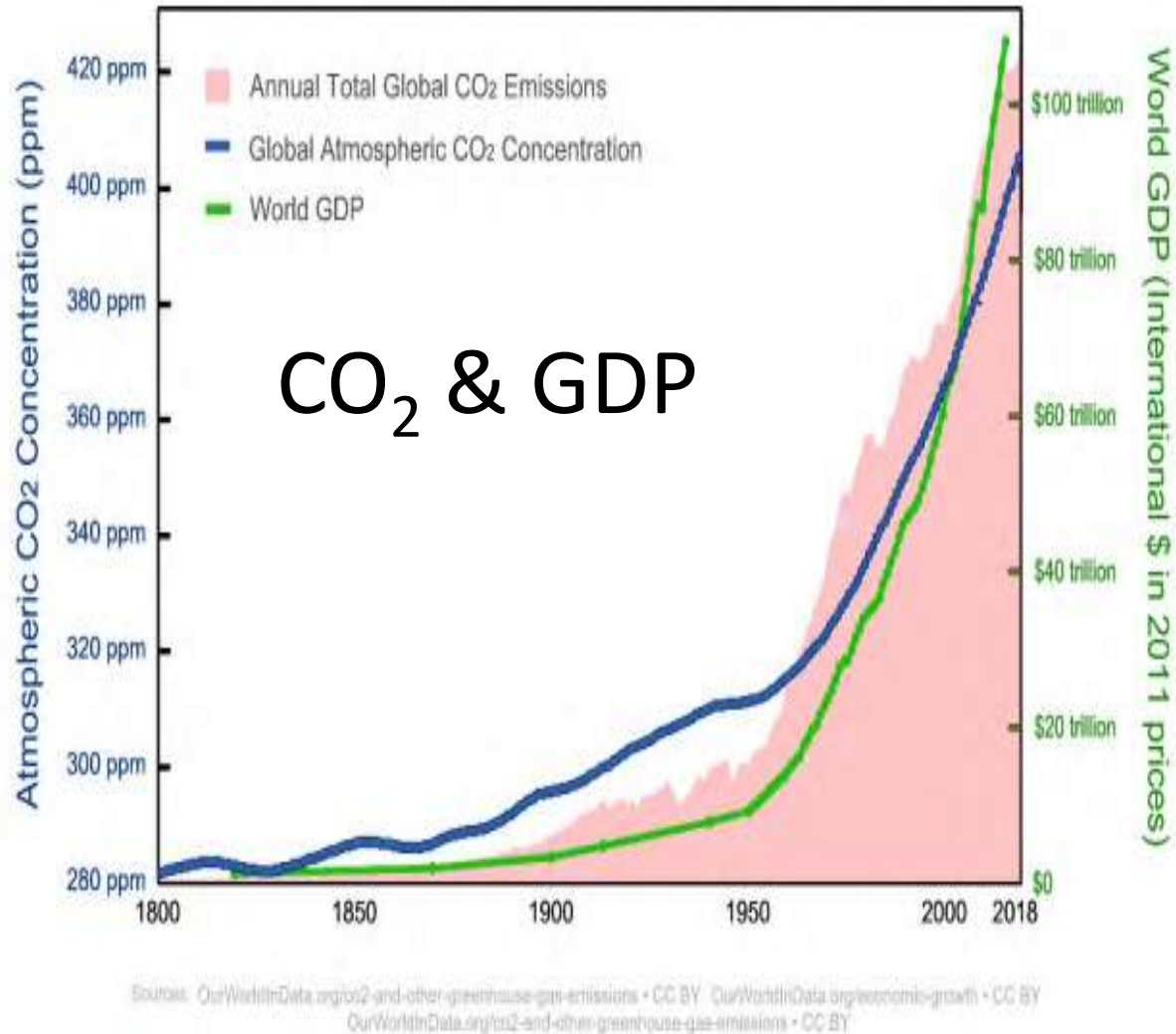
67% had no view on Global Warming & CO<sub>2</sub>

33% endorse CO<sub>2</sub> but only 22% of that 33% cited CO<sub>2</sub> as cause of AGW

So  $33\% * 22\% = 7\%$

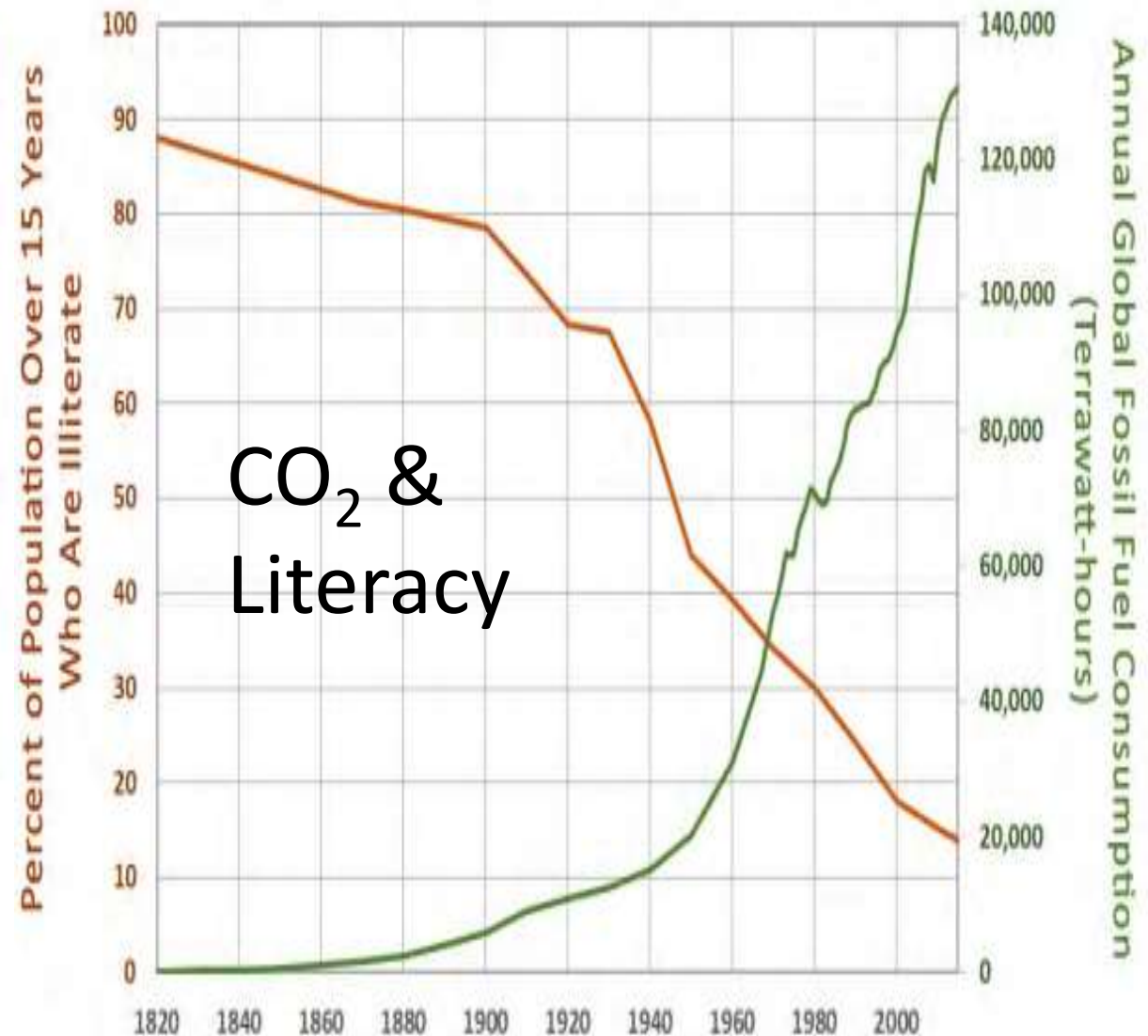
**ALWAYS QUOTED: 97%**

Two Centuries of Atmospheric CO<sub>2</sub> and World GDP Data



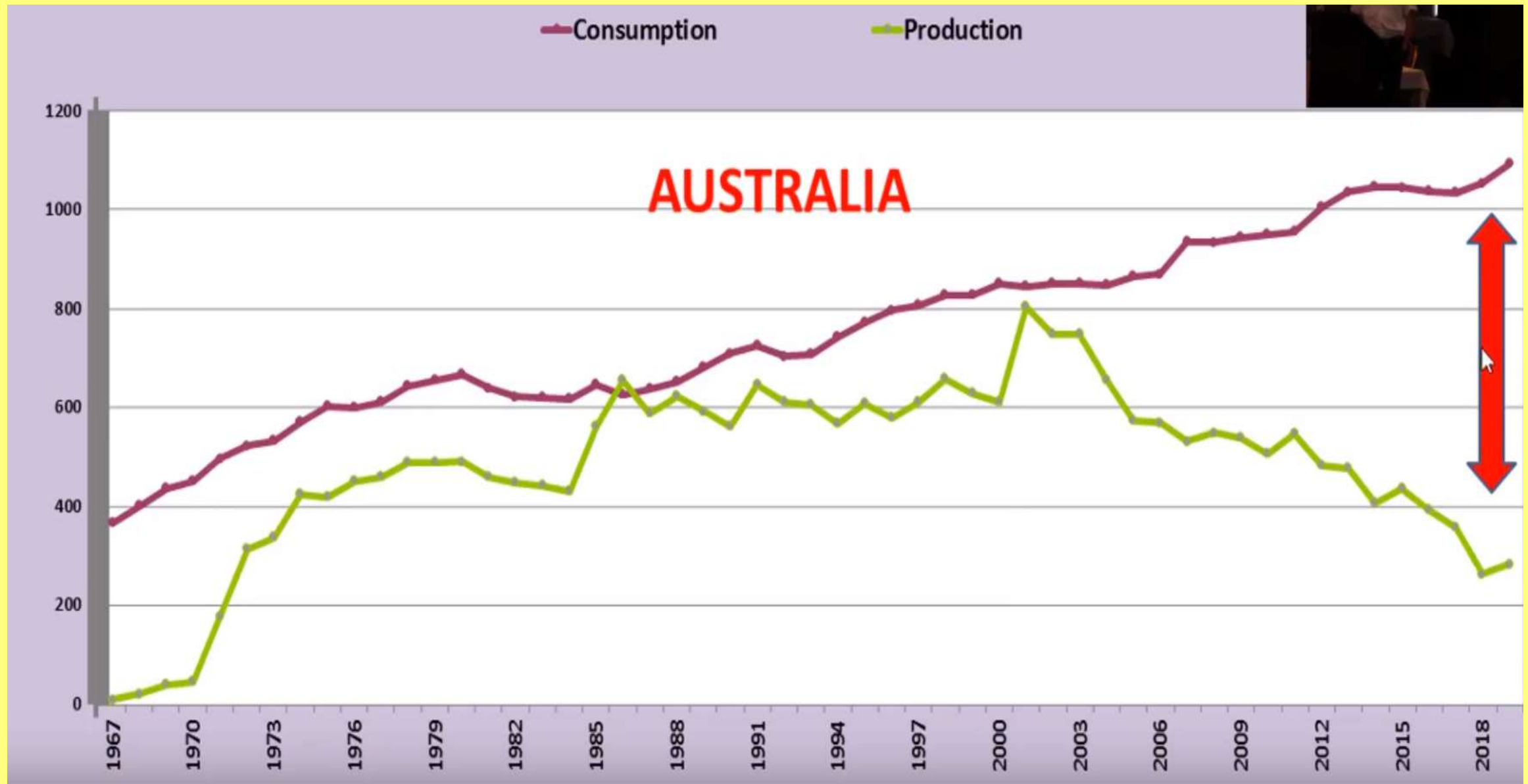
**Figure III.B.1.2.** World GDP (green line) plotted with annual total global CO<sub>2</sub> emissions (shaded pink area) and global atmospheric CO<sub>2</sub> concentration (blue line) from 1800 to 2018.

Two-century Trend in Global Illiteracy and Fossil Fuel Consumption



CO<sub>2</sub> & Literacy

# Aus only has 22 days strategic fuel reserve



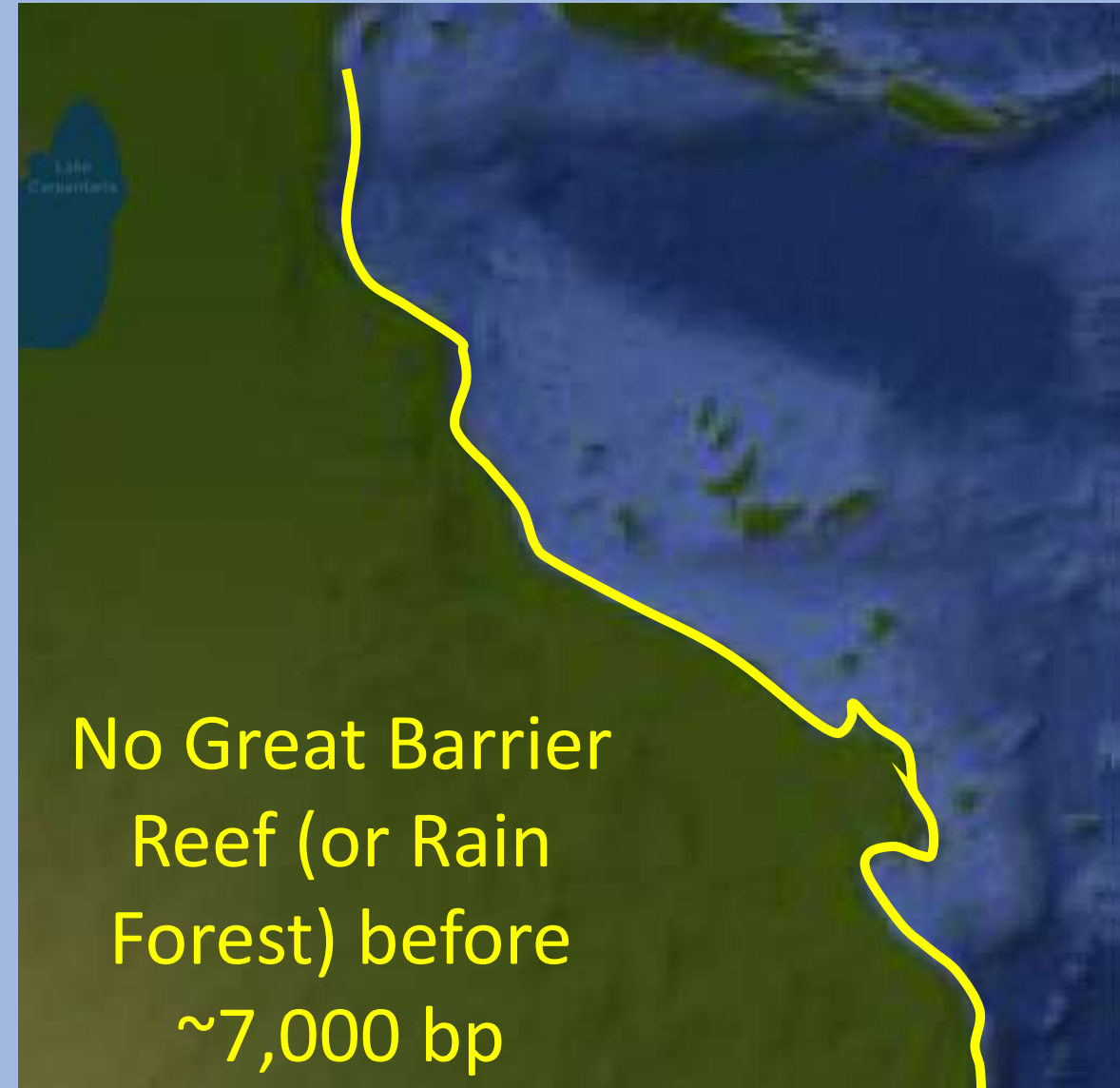
# Great Barrier Reef NOT Dying

8

Bleaching a recurrent El Nino phenomenon, warming (or cooling) coral polyps expel algae, but do not die.

Is a coral survival mechanism developed by several million years of temperature changes.

**Polyyps maintain constant pH at calcification site**



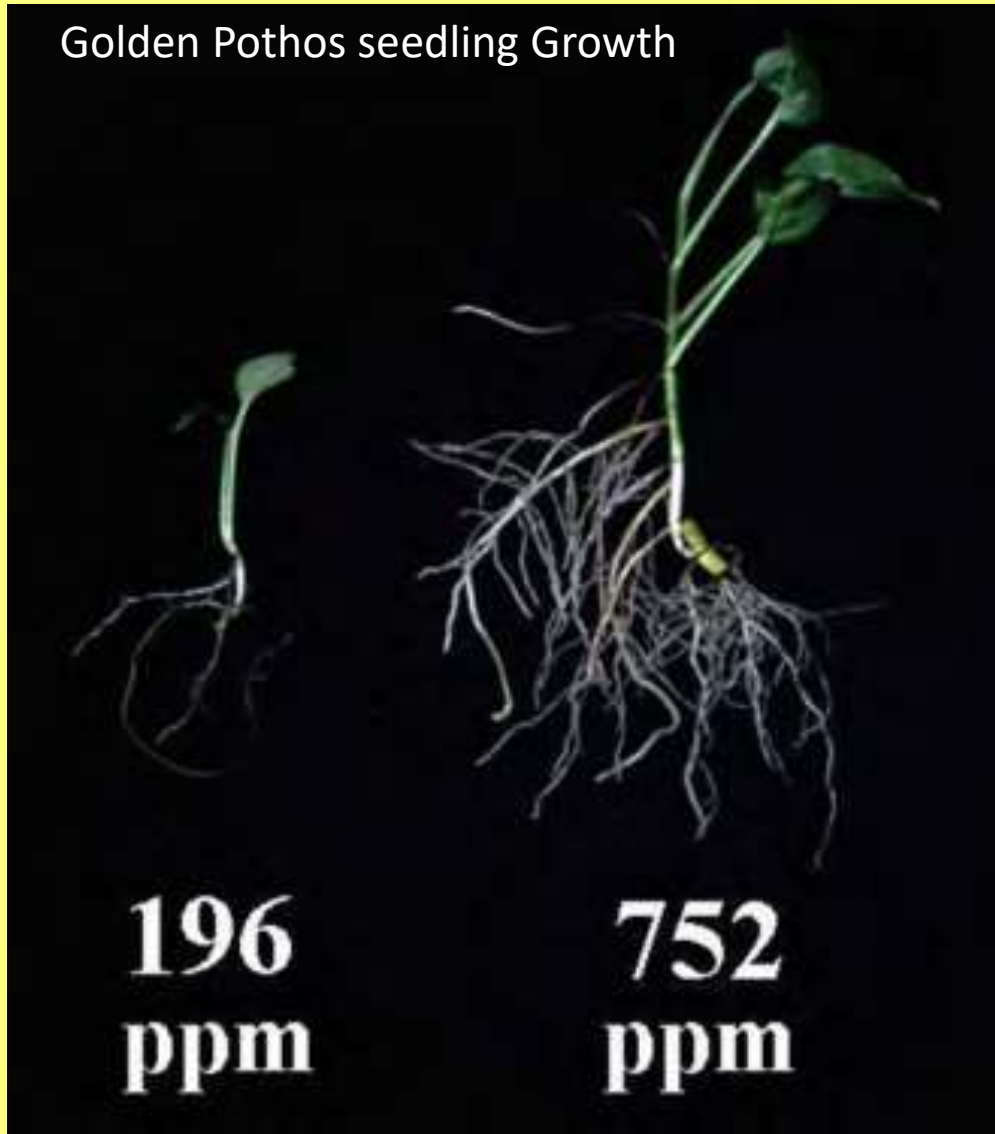
You can have your solar panels and your  
turbines on the hills;

You can use the warmth of sunshine to reduce  
your heating bills.

You can dream you're self-sufficient as you weed  
your vegie bed;      ***A diesel in the shed***

As long as you make sure to keep -

Golden Pothos seedling Growth

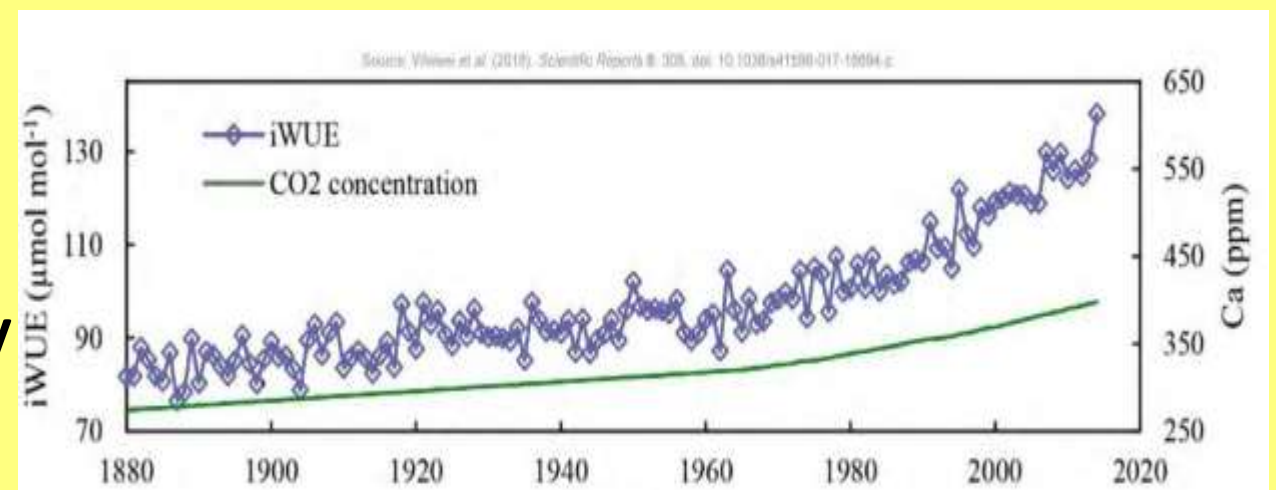


Intrinsic Water Use Efficiency  
increases with CO<sub>2</sub>

Response of Pigeon pea (*Cajanus cajan* L.) to Elevated CO<sub>2</sub>



Source: Sreeharsha et al. (2015) *Plant Science* 231: 82-93



# Australia's Worsening Drought

1102-1212:

*80 of 110 years  
drought affected*

1174-1212:

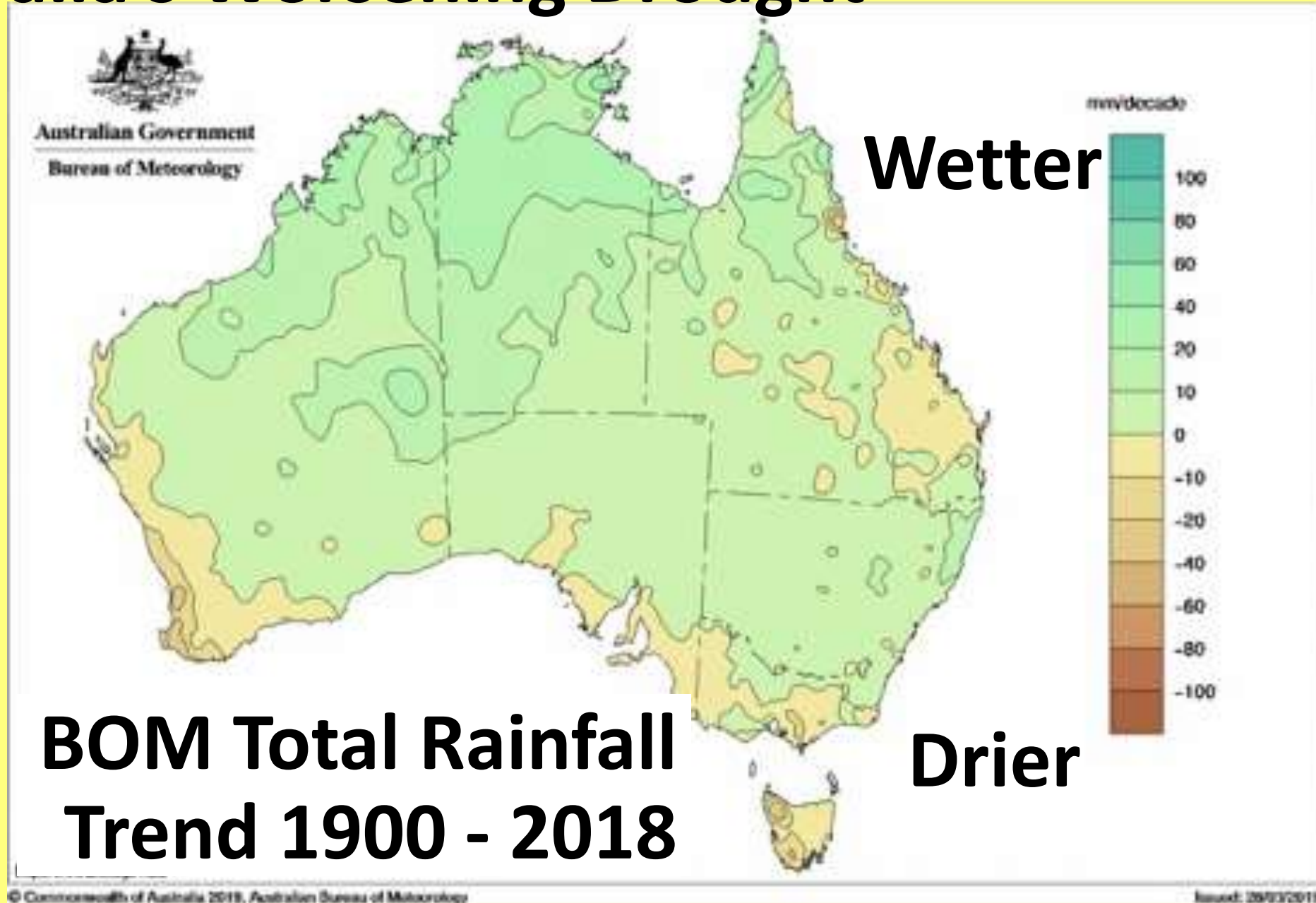
38-year drought

*~1895-1902:*

*Federation  
Drought*

*1997 – 2009:*

*Millenium  
Drought*

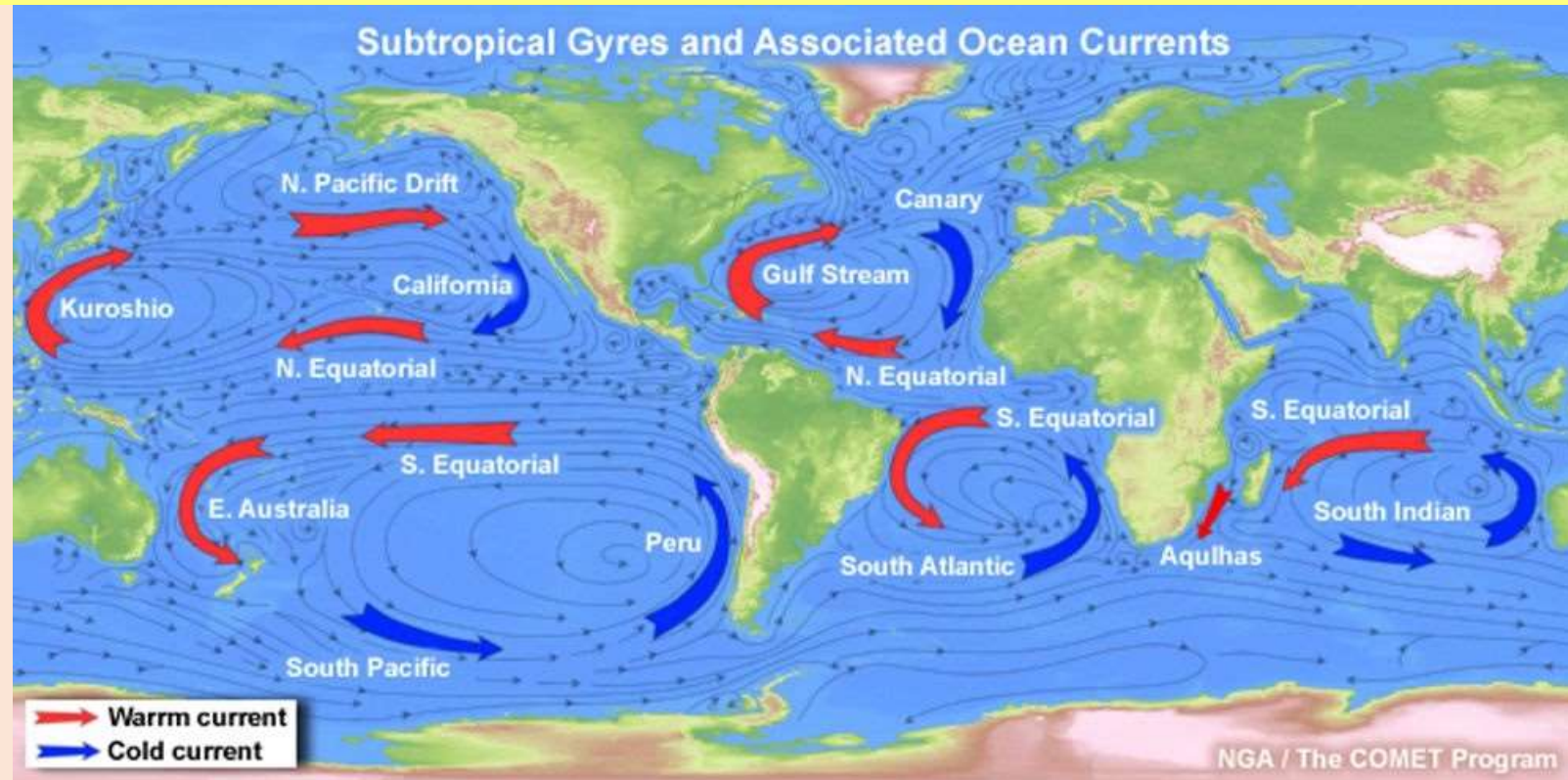


*“Each generation that discovers something from its experience must pass that on, but it must pass that on with a delicate balance of respect and disrespect, so that the [human] race-- now that it is aware of the disease to which it is liable--does not inflict its errors too rigidly on its youth, but it does pass on the accumulated wisdom, plus the wisdom that it may not be wisdom”.*

*From Richard Feynman's lecture in 1966: What is science?*

# THE OCEANS ARE THE FLYWHEELS THAT REGULATE CLIMATE CHANGE

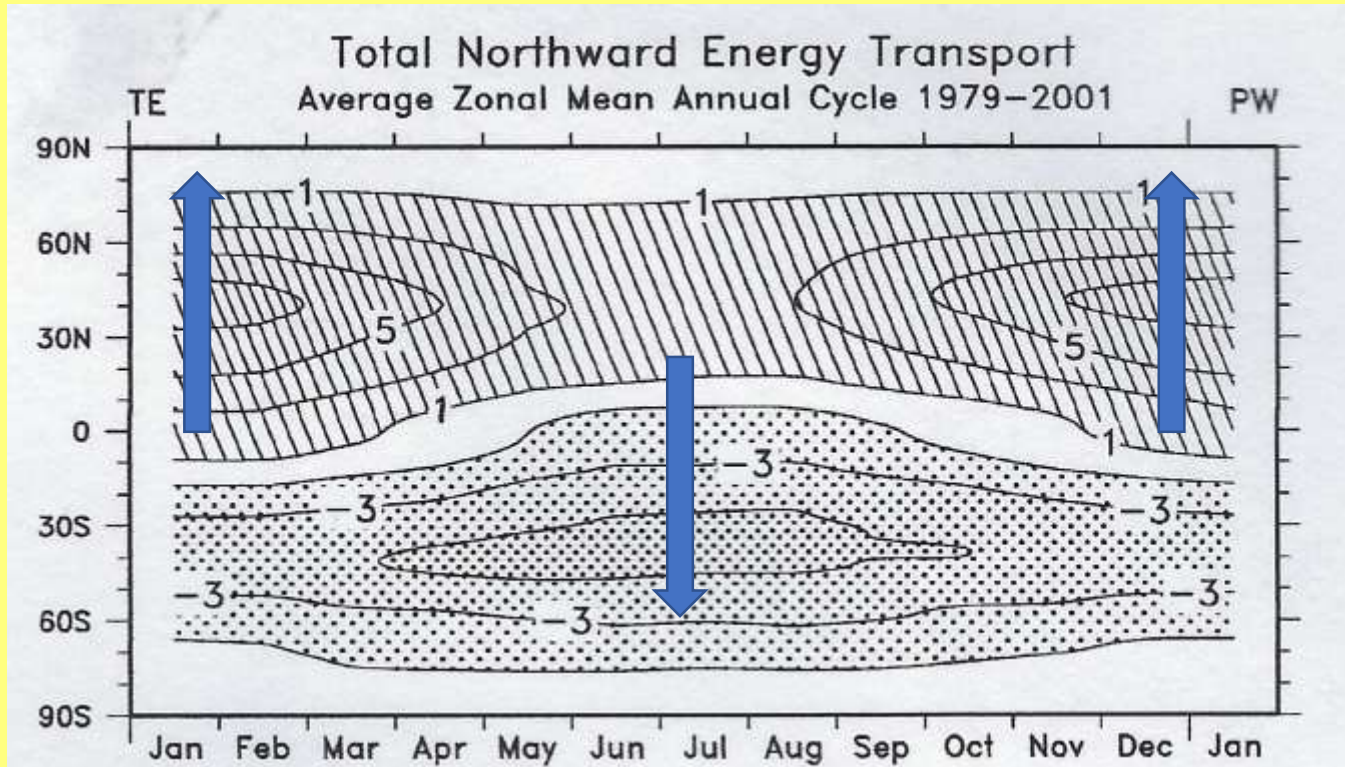
- The mass of a column of air is equivalent to 10 m of ocean
- The heat in the same column of air is equivalent to only 4 m of ocean depth
- The ocean averages about 4,000 m deep



**The slowly changing ocean circulations cause climate change**

# THE ATMOSPHERE

## Poleward transport of heat is seasonal



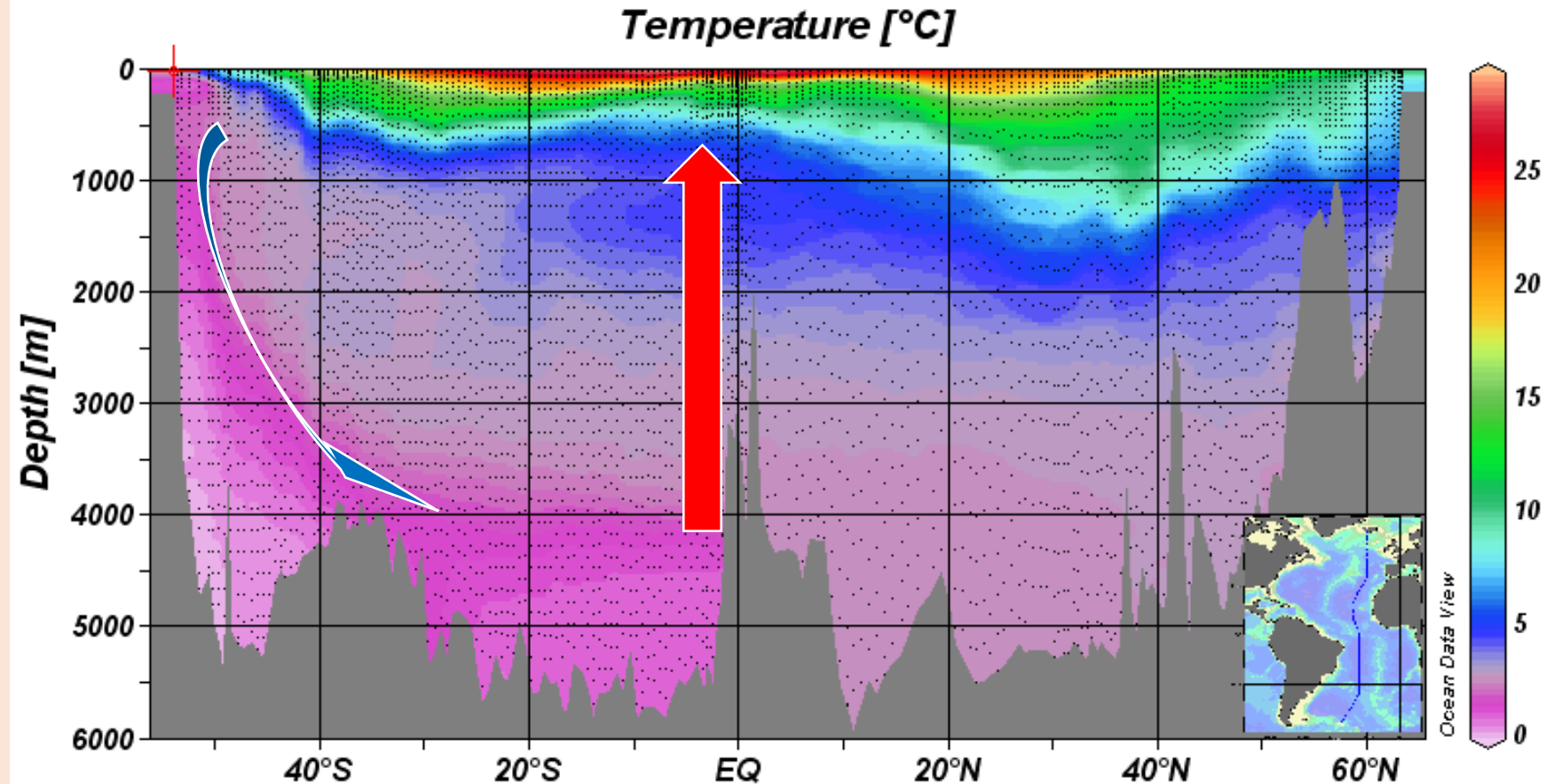
- The atmosphere is fast response
- Heat is transported from the tropics to the polar regions *primarily in the winter hemisphere*

# THE OCEANS:

The thin warm tropical surface layer is heated by solar radiation.

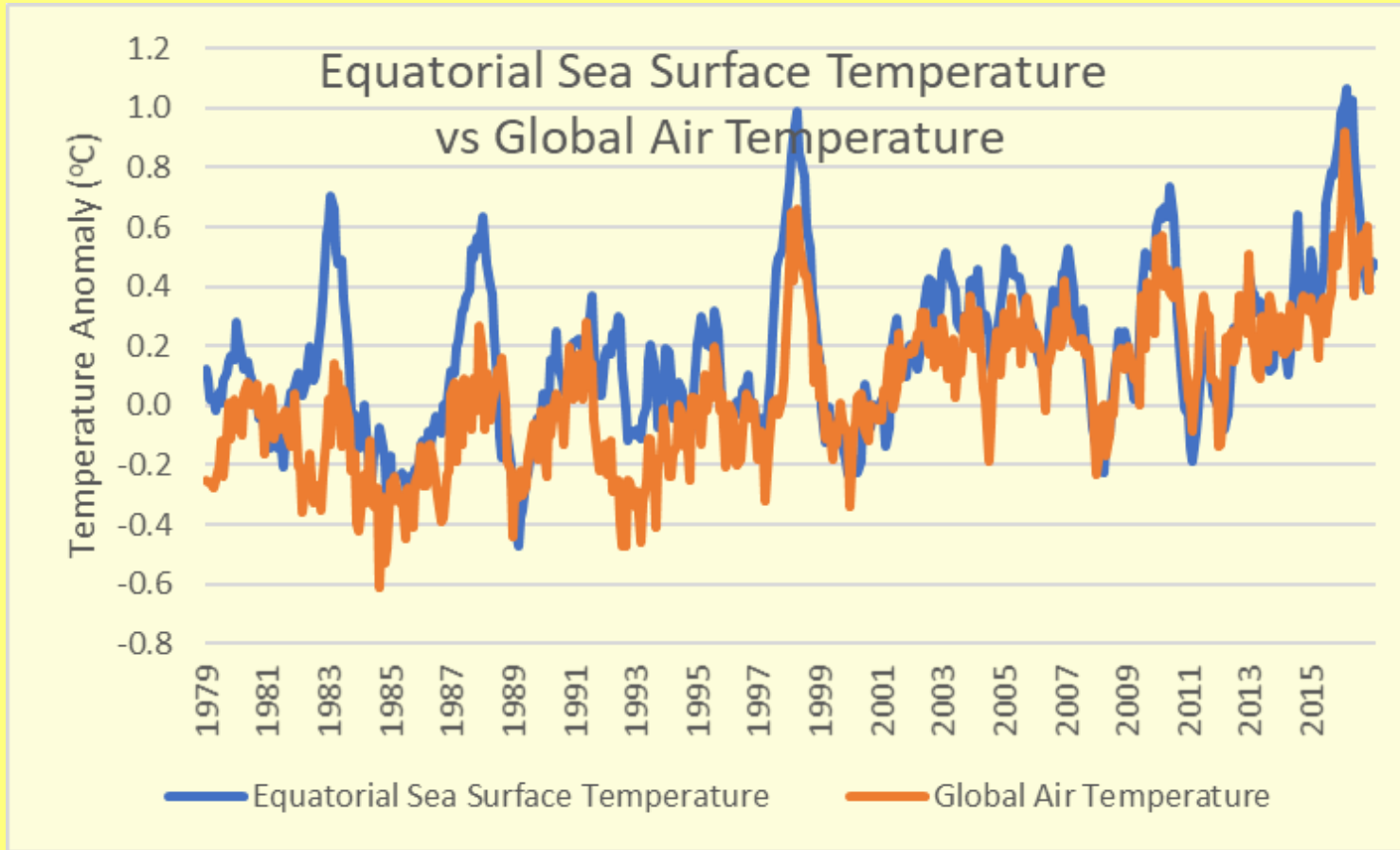
As polar waters lose heat by radiation and become cold and more dense they sink to the ocean interior

*In the tropics, the rate of overturning regulates the surface temperature*



# EQUATORIAL OCEANS

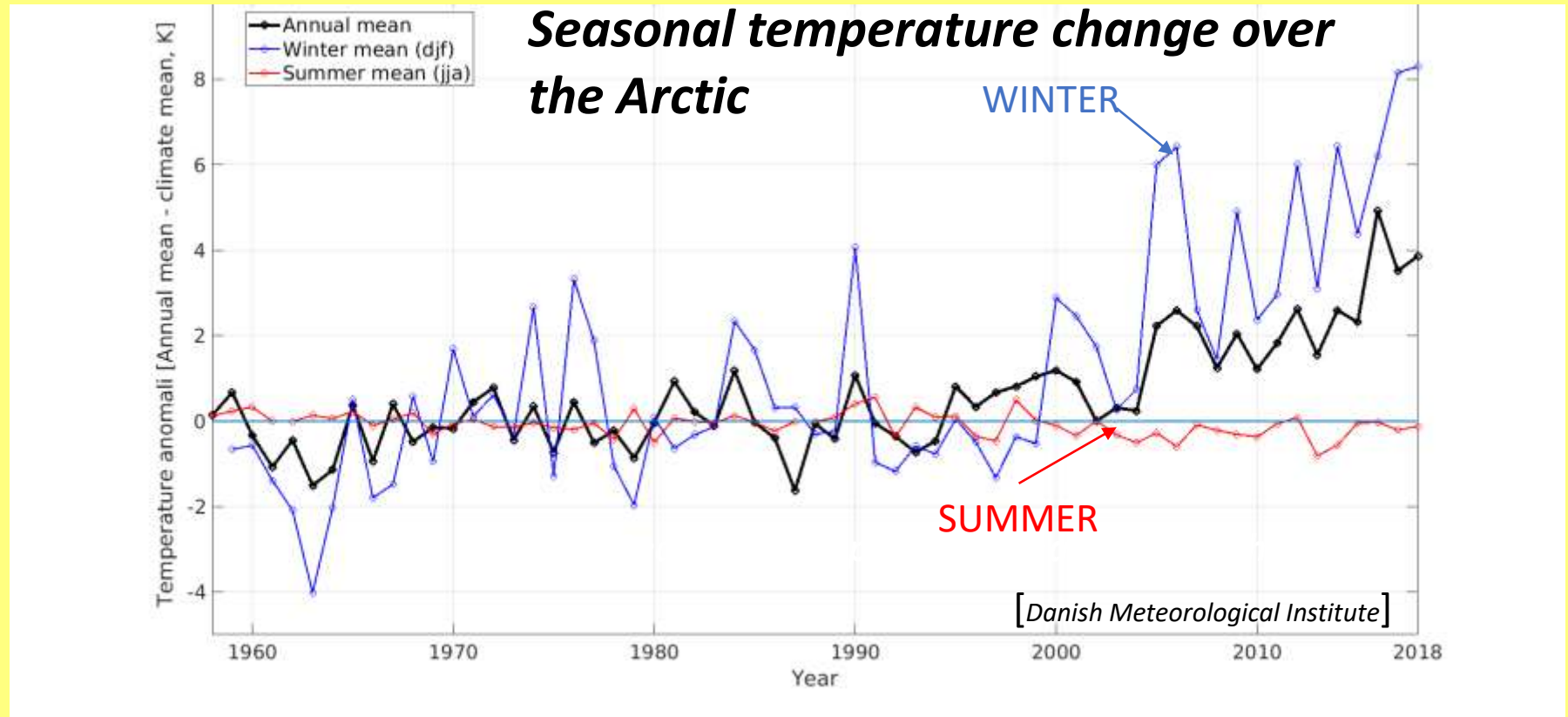
## The source of climate variations



- Atmospheric convection links the temperature of the atmosphere to the warming ocean temperatures.
- The correlation between equatorial sea surface temperature and tropical atmosphere temperature is 0.88; globally it is 0.69
- *That is, nearly 75% of recent temperature change directly emanates from ocean circulations*

Sources: Air temperature – UAH satellite LT V6 (Spencer, Christy and Braswell)  
Sea Temperature – NCEP/NCAR Reanalysis (Kalnay, et al.)

# NO SUMMER WARMING OVER THE NORTH POLE



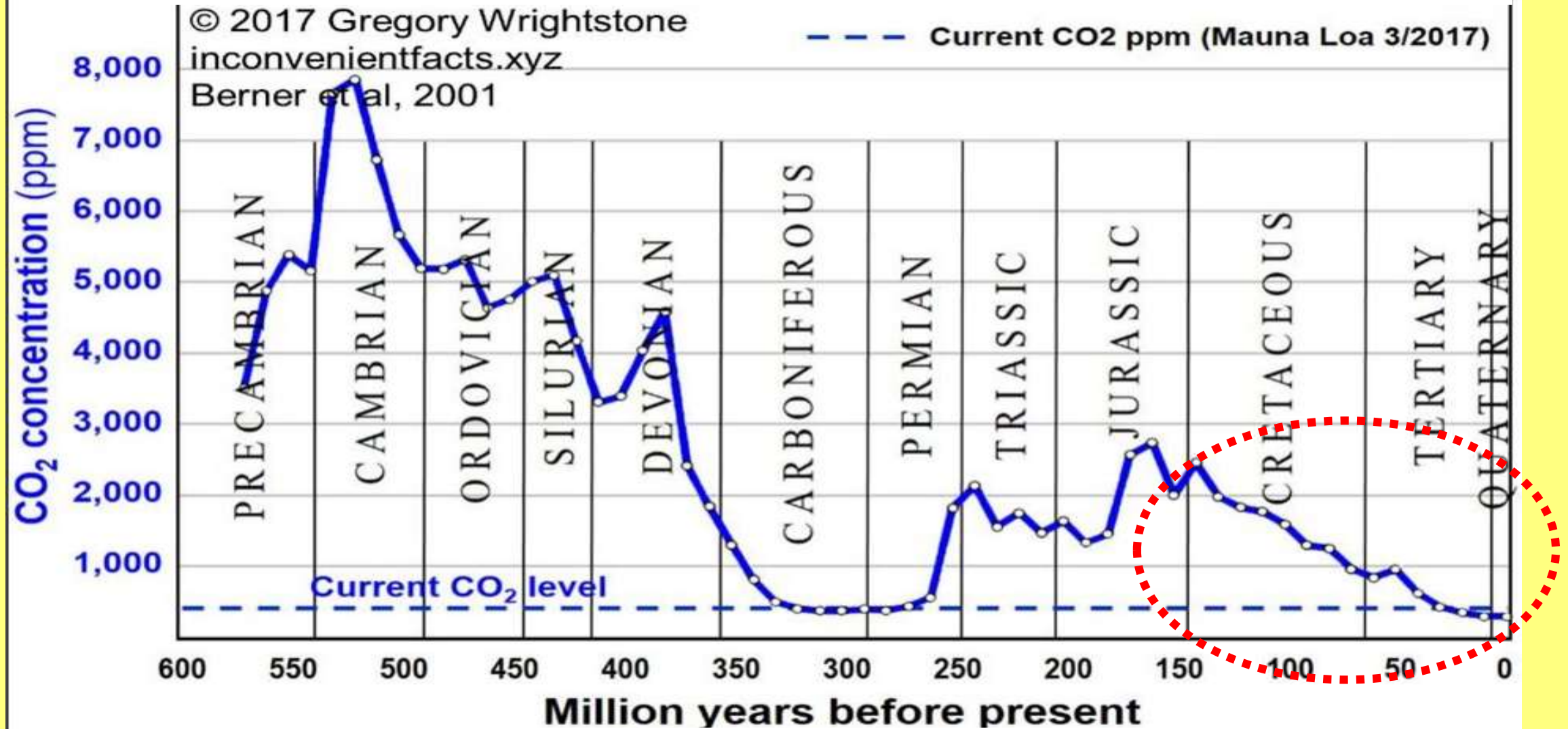
- Warming over middle and high latitudes is from increased transport of heat by the atmosphere from the tropics – the warming ocean temperatures
- There is little heat transport in summer, so no warming

# SUMMARY

## *Ocean variability; not carbon dioxide*

- The oceans are the inertial and thermal flywheels of the climate system; they regulate heat transfer to the tropical atmosphere, and ultimately to polar regions
- Climate change is characterised by changing polar temperatures, by changing ice mass, and by varying length of the growing season
- ***Climate variability – It is natural and cyclic with a range of timescales corresponding to the ocean circulations***
- **Global warming is Earth greening and not to be feared**

# Atmospheric CO<sub>2</sub> falls over 600 million Years



Panic ? CO<sub>2</sub> Always higher than today