

Climate Change in Perspective



The Right Climate Stuff
Research Team

OVERVIEW

- **Human-produced CO2 contributes insignificantly to global warming.**
The Right Climate Stuff (TRCS) – retired NASA engineers/scientists
- **Natural variation plays a much more significant role in climate change**
- **Over millennia, changes in Earth's orbit, tilt, and wobble control climate.**
- **The rise in CO2 has caused a greening of the earth**
- **CO2 fertilization has greatly enhanced the production of food.**
- **Increased CO2 is not causing weather or sea level extremes!**
- **CO2 is safe, good and not a pollutant!**
- **Human-produced CO2 causing catastrophic climate change is purely political!**
- **The public should be made aware of the facts.**



Ex-NASA Scientists' Assessment

- **Over 7 Years Of Extensive Climate Study.**
- **A Team Whose Motto Is; “In God We Trust”, All Others Bring Data!”**
- **Physicists, Chemists, Engineers, Astrophysicists, Physician, Mathematicians, Geologists and Meteorologist's; Many PhD's, An Unusually Objective, Interdisciplinary Team.**
- **Retired, So Not Beholden To NASA or The Administration.**
- **All Non-Paid Volunteers & Not Working For “Big Oil”, Big Anything.**
- **Willing To Risk Impeccable Reputations.**
- **Non-Political.**
- **A Team That Invites Input From Experts On All Sides Of The Issues.**
- **Website Address: therightclimatestuff.com**



Conclusions of TRCS Research Team

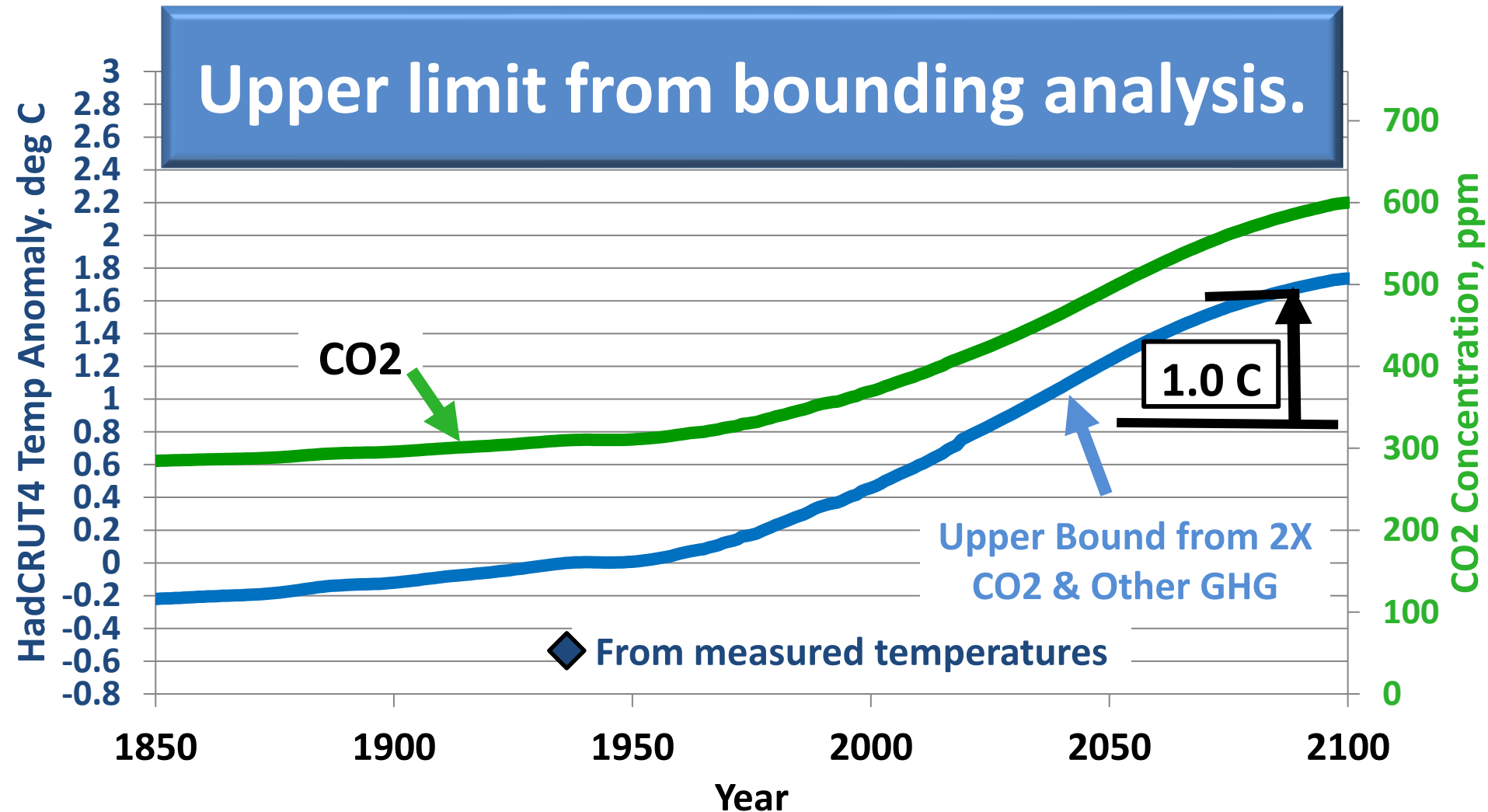
- 1. Human-produced CO₂ is not leading to Catastrophic Global Warming (CAGW)*
- 2. IPCC conclusions are not based on empirical data, but on faulty models of unrealistic scenarios. [Garbage in → Garbage Out]*
- 3. The Green New Deal justifies policy and legislation based these faulty scenarios*

OVERVIEW

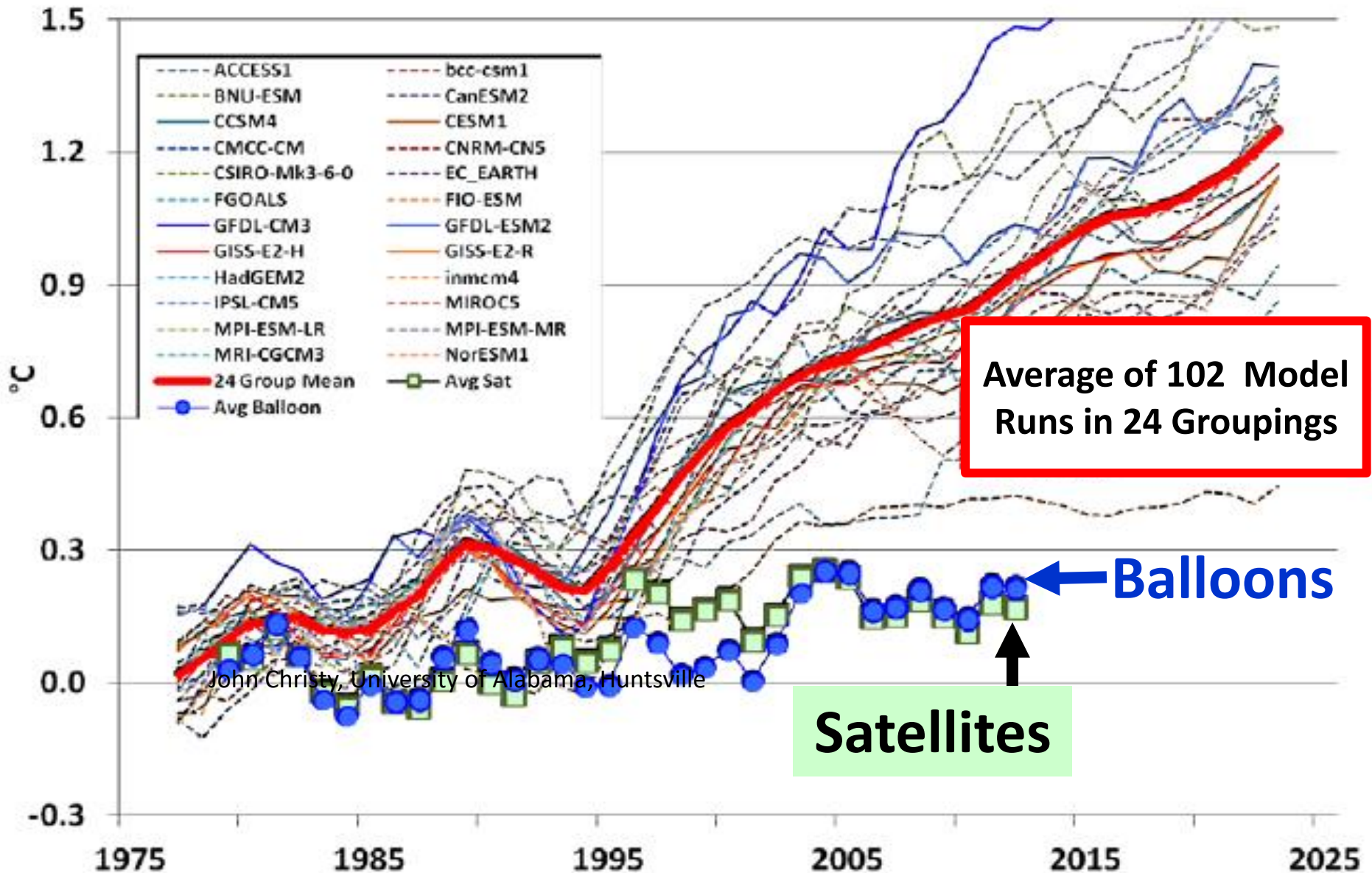
- **Human-produced CO2 contributes insignificantly to global warming.**
The Right Climate Stuff (TRCS) – retired NASA engineers/scientists



Warming Projection from Greenhouse Gases



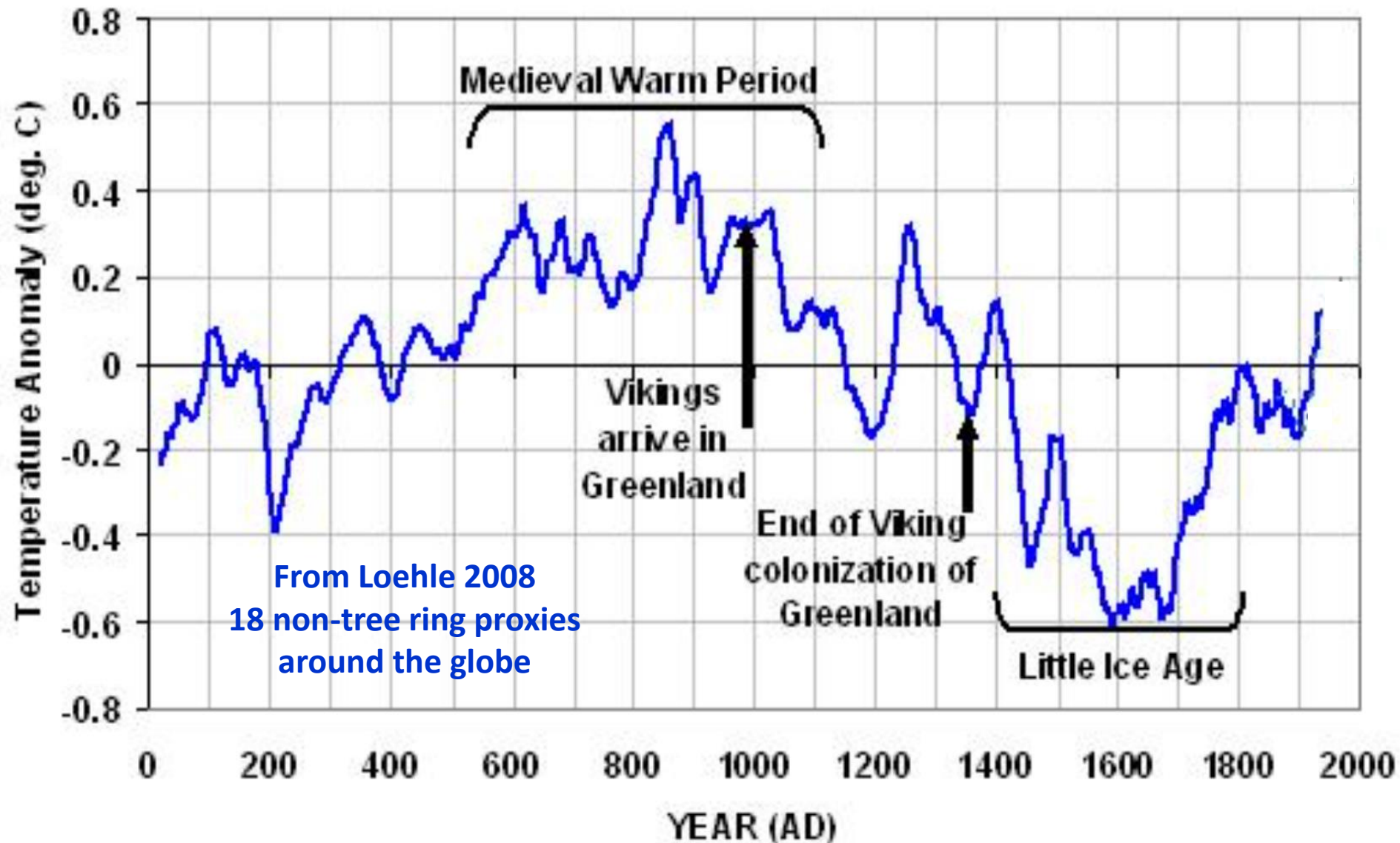
Tropical (20S-20N) Mid-Troposphere Temp. Trend



OVERVIEW

- Human-produced CO₂ contributes insignificantly to global warming.
The Right Climate Stuff (TRCS) – retired NASA engineers/scientists
- **Natural variation plays a much more significant role in climate change**

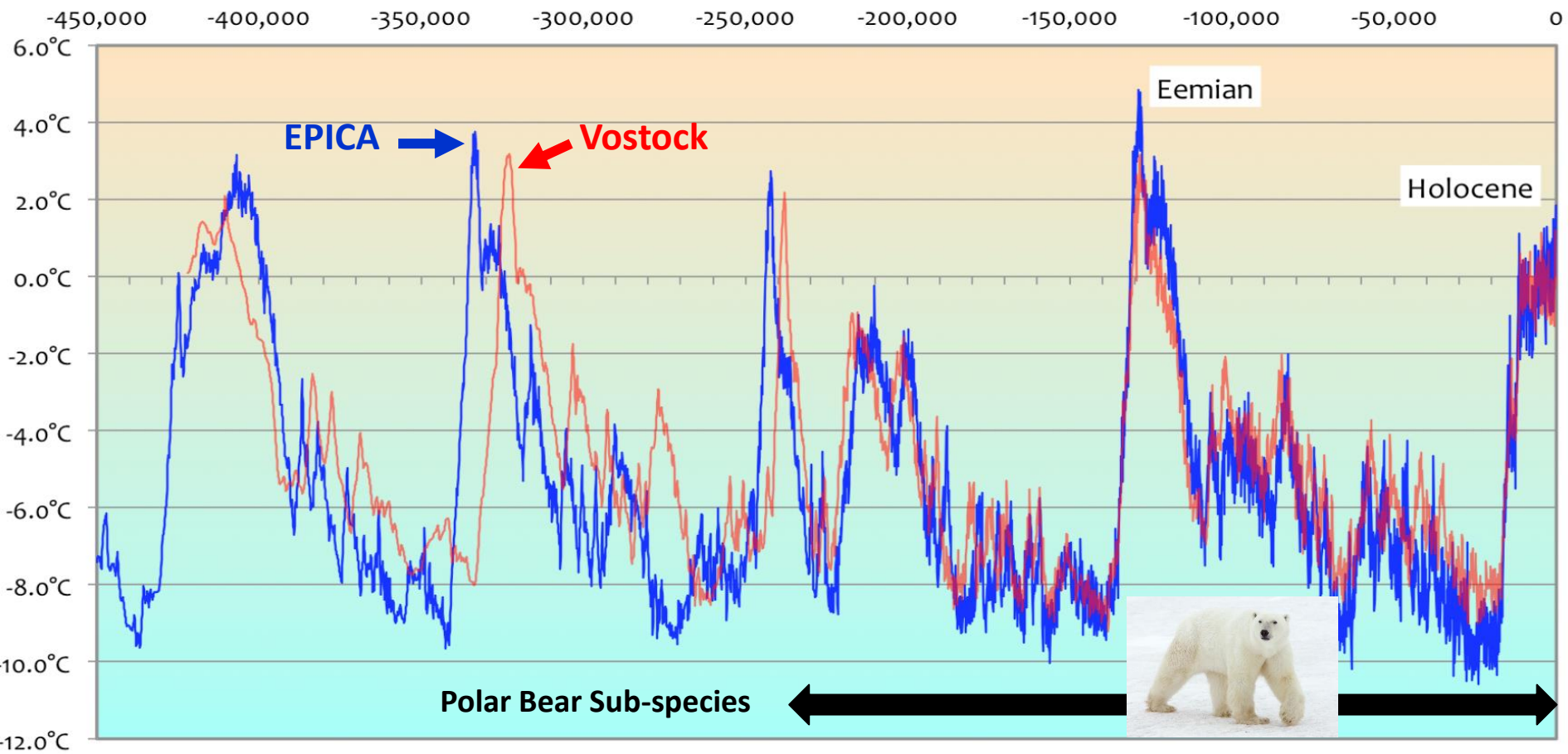
Paleoclimate Proxy Temperature



OVERVIEW

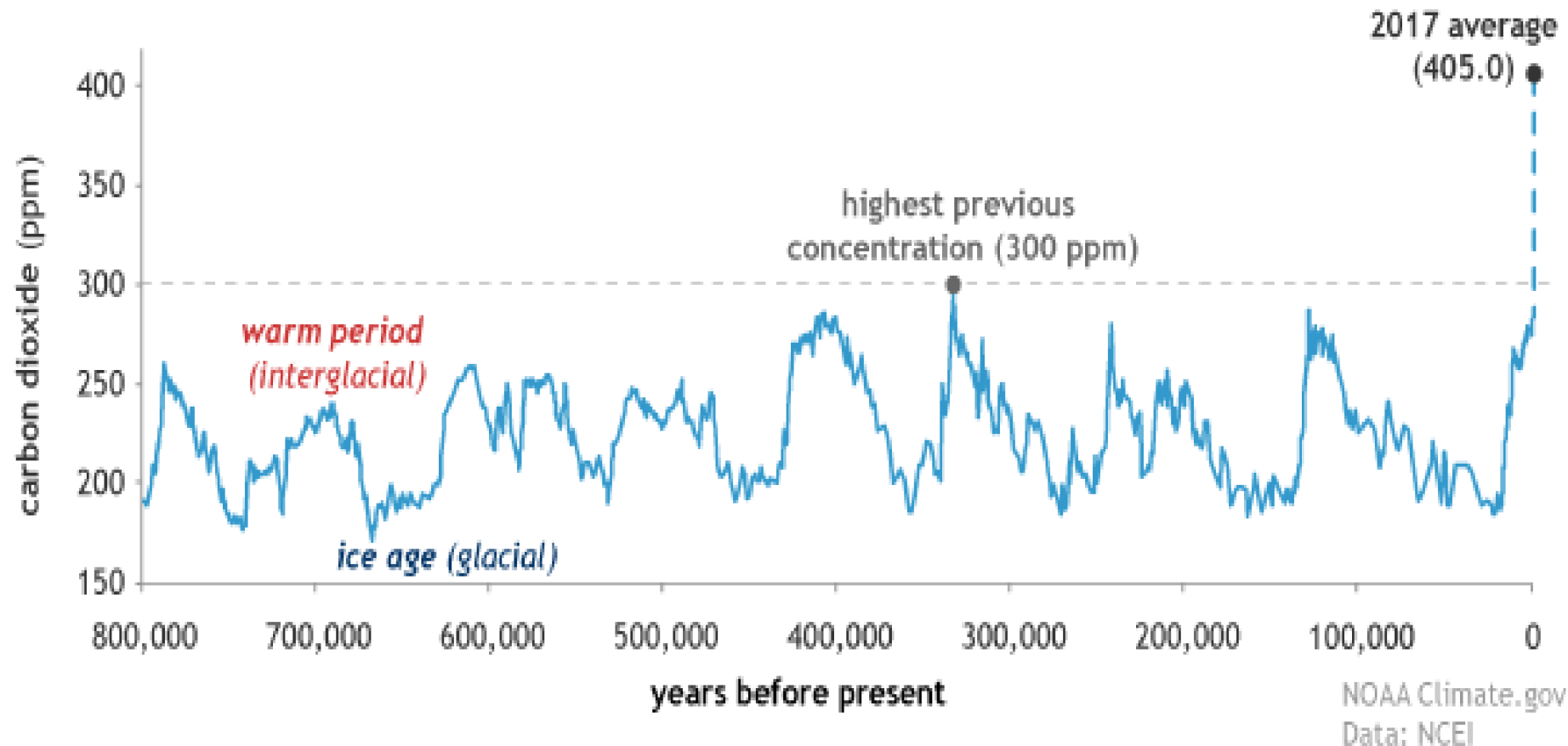
- **Human-produced CO2 contributes insignificantly to global warming.**
The Right Climate Stuff (TRCS) – retired NASA engineers/scientists
- **Natural variation plays a much more significant role in climate change**
- **Over millennia, changes in Earth's orbit, tilt, and wobble control climate.**

The EPICA and Vostock Antarctic Ice Core temperature anomalies
superimposed: showing 5 interglacial periods in the last 450,000 years



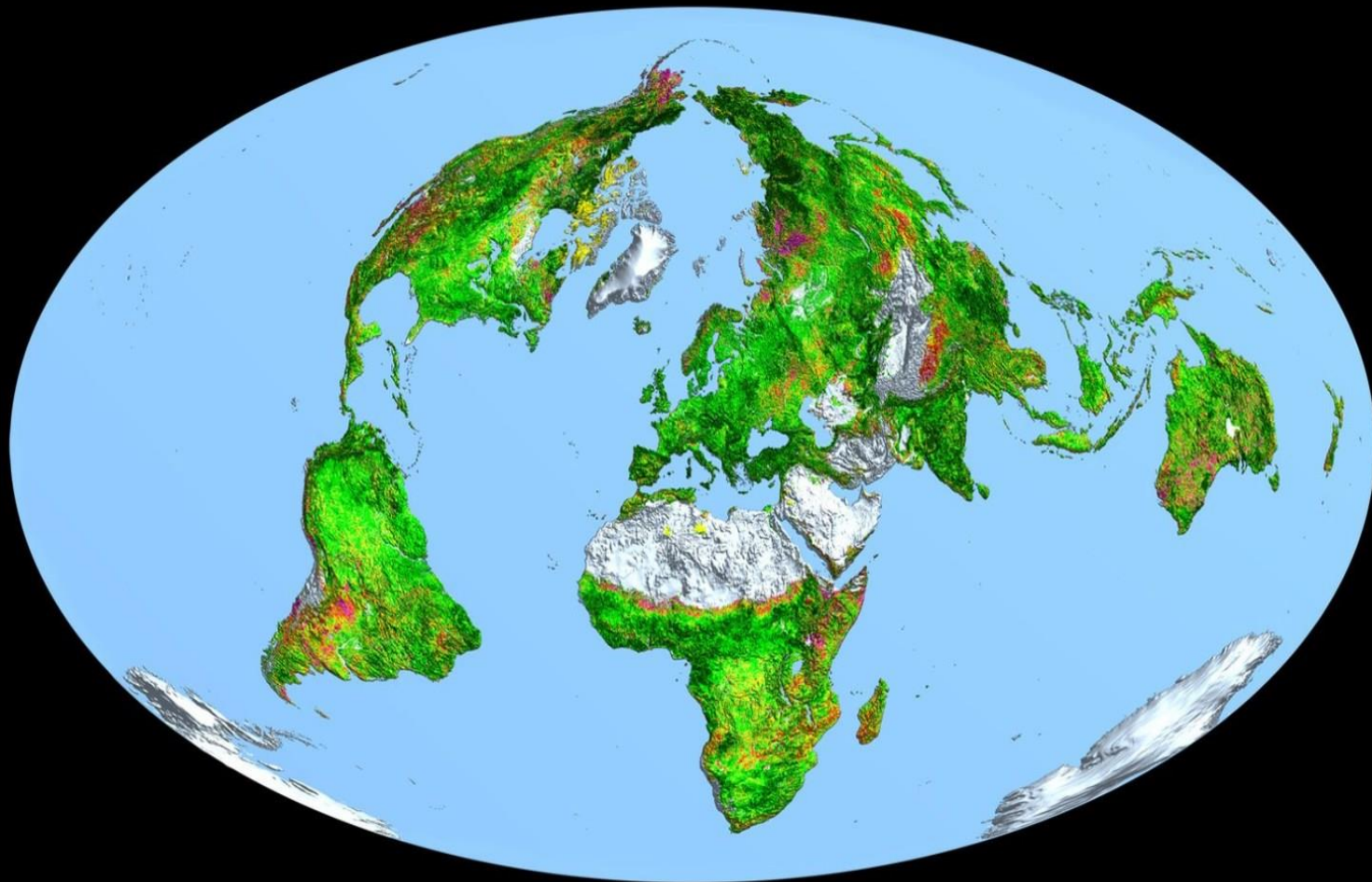
CO₂ levels over 800K yrs.

CO₂ during ice ages and warm periods for the past 800,000 years



OVERVIEW

- **Human-produced CO2 contributes insignificantly to global warming.**
The Right Climate Stuff (TRCS) – retired NASA engineers/scientists
- **Natural variation plays a much more significant role in climate change**
- **Over millennia, changes in Earth's orbit, tilt, and wobble control climate.**
- **The rise in CO2 has caused a greening of the earth**



<-30 <-15 -5 5 15 25 35 >50
Percent

Change in Leaf Area (1982-2015)

<https://www.nasa.gov/feature/goddard/2016/carbon-dioxide-fertilization-greening-earth>

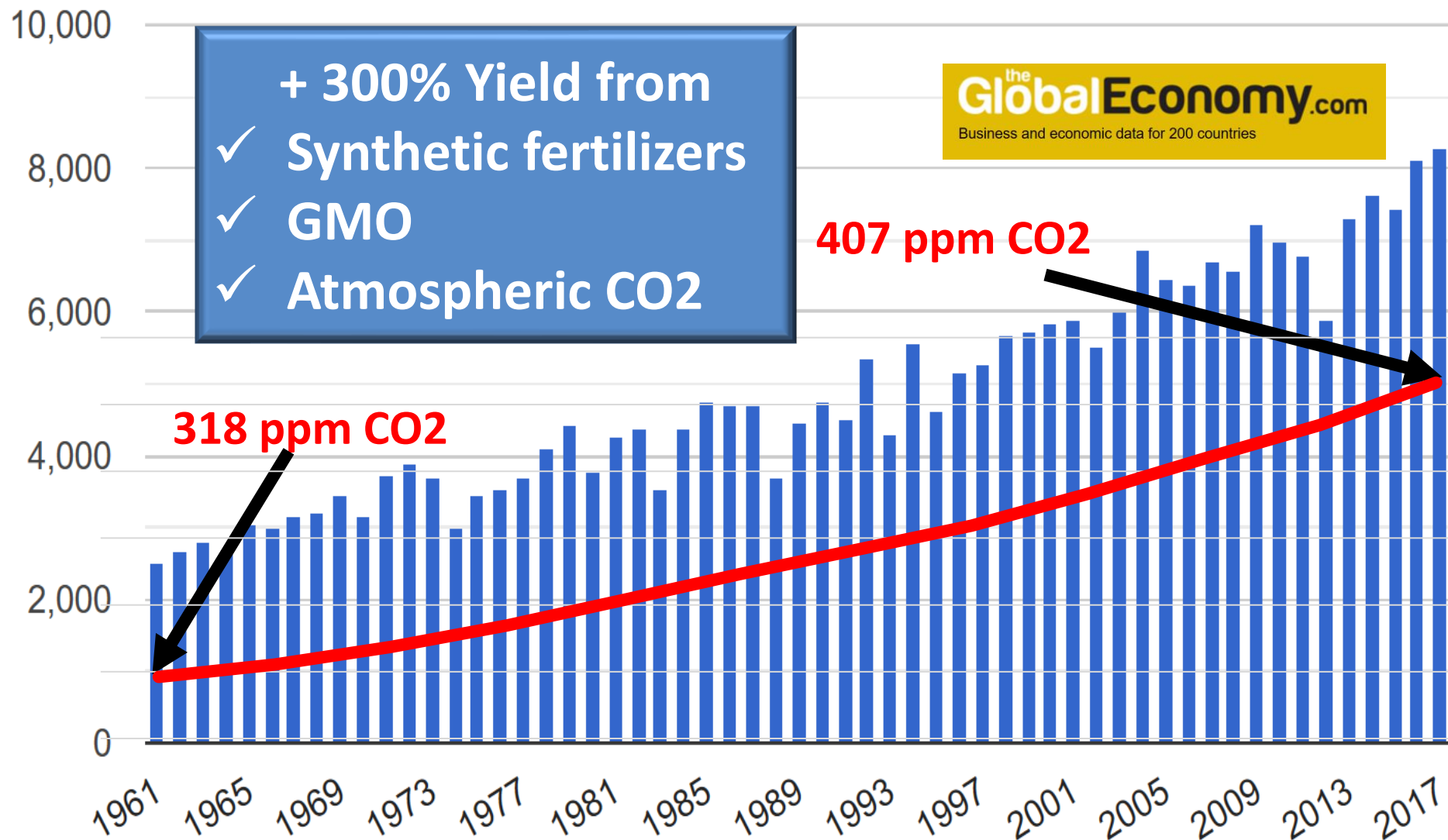


Dr. Sherwood Idso, Research Physicist with the U.S. Department of Agriculture's Research service at the U.S. Water Conservation Service laboratory in Phoenix, Arizona, holding ambient and CO₂ enrichment signs above Eldarica Pines. Imagine Earth's forests in a CO₂ enriched future. [numbers are parts per million]

OVERVIEW

- **Human-produced CO2 contributes insignificantly to global warming.**
The Right Climate Stuff (TRCS) – retired NASA engineers/scientists
- **Natural variation plays a much more significant role in climate change**
- **Over millennia, changes in Earth's orbit, tilt, and wobble control climate.**
- **The rise in CO2 has caused a greening of the earth**
- **CO2 fertilization has greatly enhanced the production of food.**

USA Cereal Crop Yield by Hectar



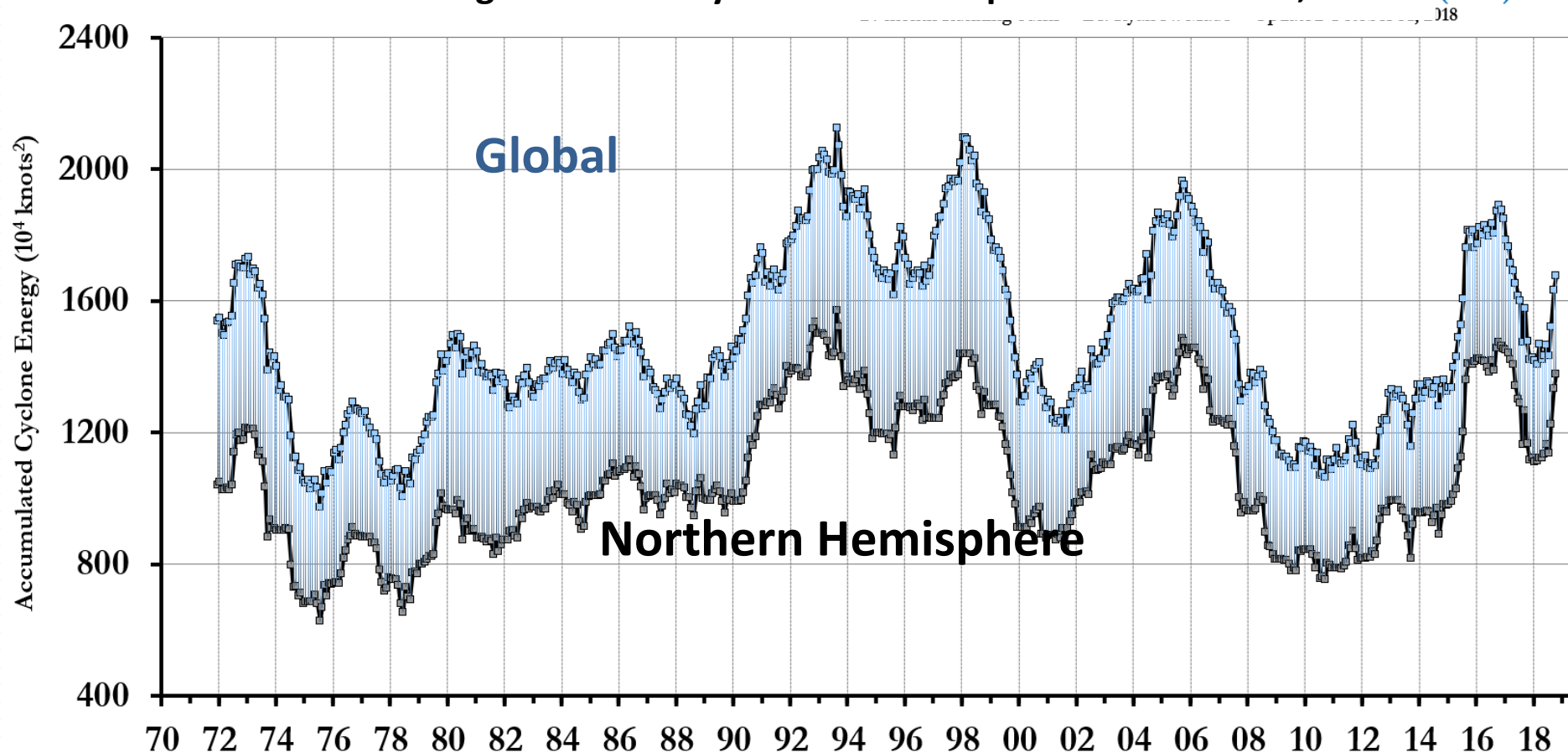
OVERVIEW

- Human-produced CO2 contributes insignificantly to global warming.
The Right Climate Stuff (TRCS) – retired NASA engineers/scientists
- Natural variation plays a much more significant role in climate change
- Over millennia, changes in Earth's orbit, tilt, and wobble control climate.
- The rise in CO2 has caused a greening of the earth
- CO2 fertilization has greatly enhanced the production of food.
- Increased CO2 is not causing weather or sea level extremes!

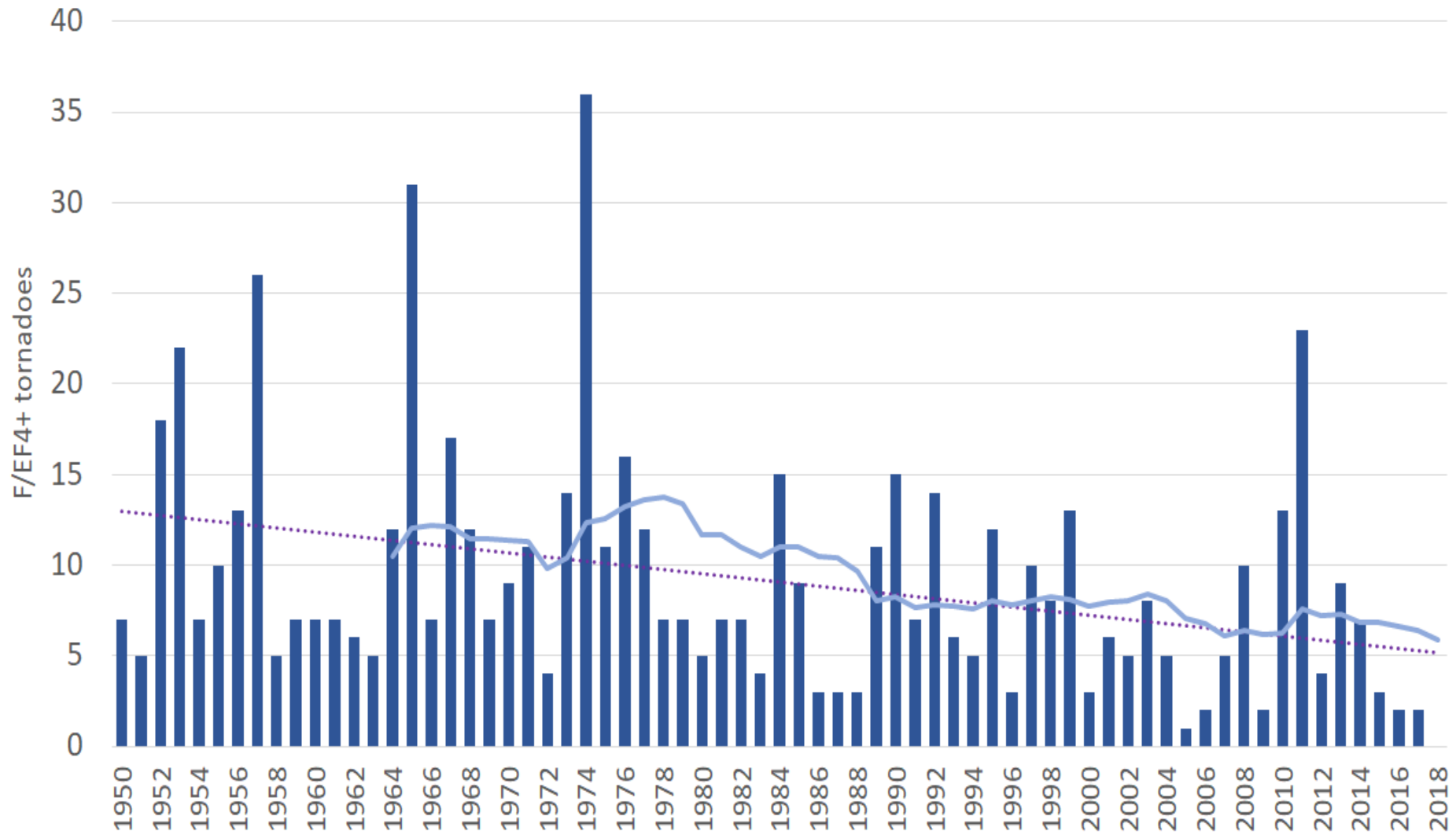
Tropical Cyclone Accumulated Cyclone Energy (ACE)

24-month Running Sums – Dr. Ryan N. Maue – Updated October 31, 2018

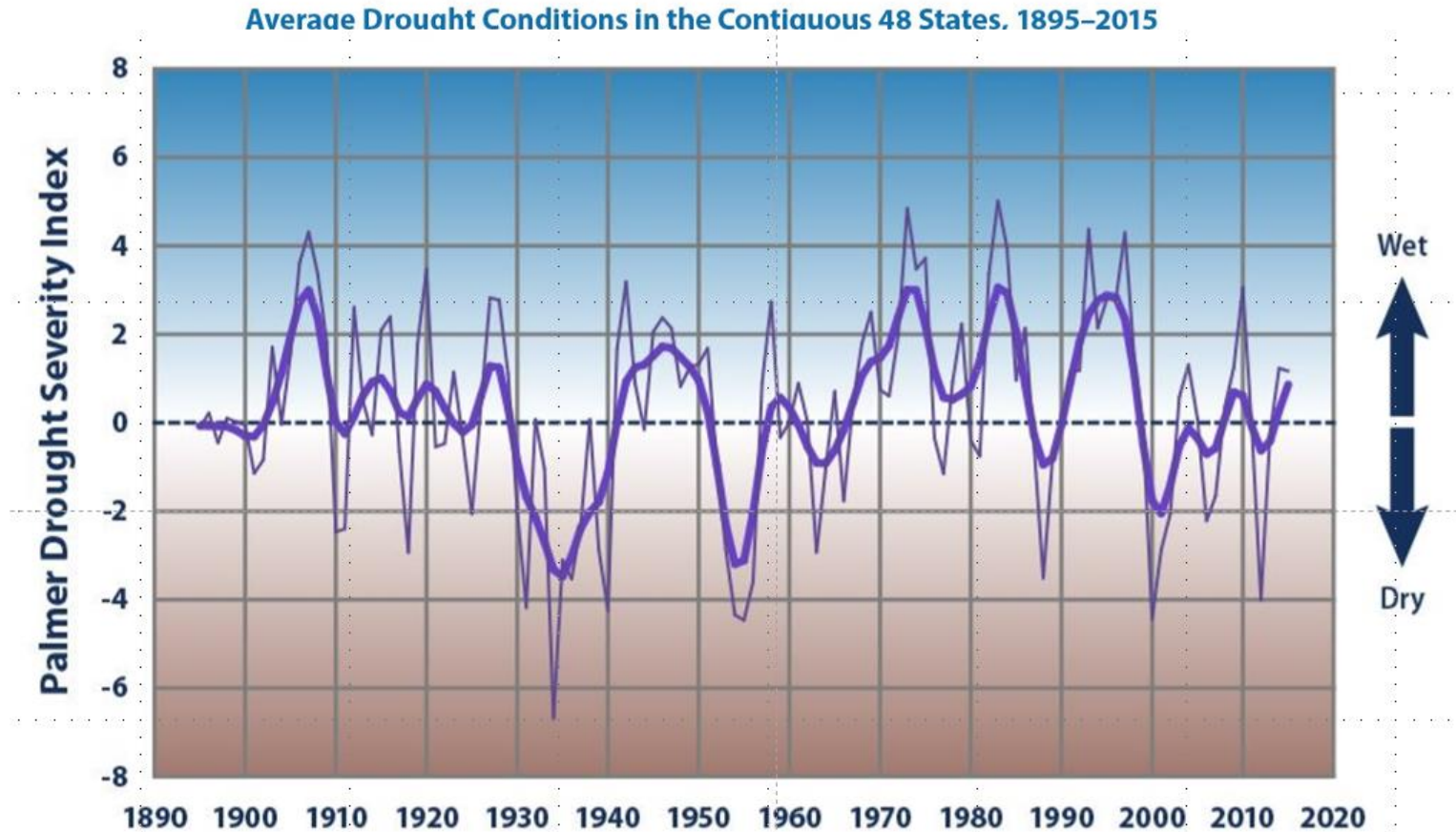
(ACE)



Violent Tornadoes in the U.S. Since 1950



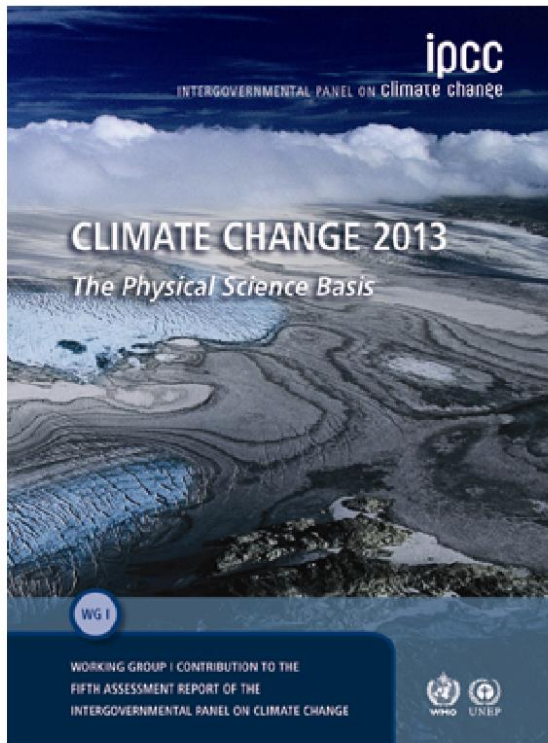
Via EPA, no long-term trends in US drought*



For more information, visit U.S. EPA's "Climate Change Indicators in the United States" at www.epa.gov/climate-indicators.

***Contiguous 48 States**

IPCC AR5 – Floods

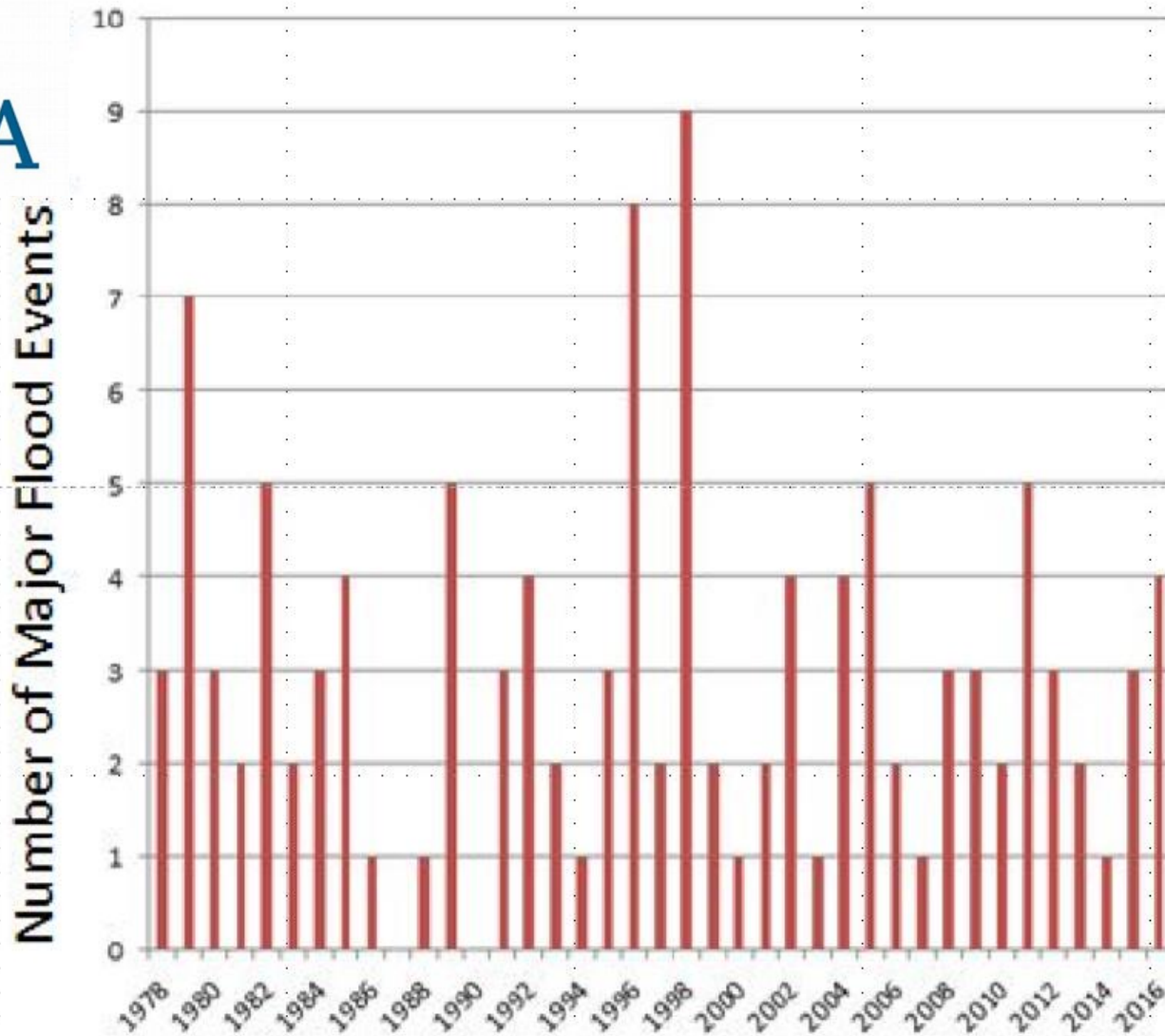


“in summary, there continues to be a lack of evidence and thus low confidence regarding the sign of trend in the magnitude and/or frequency of floods on a global scale.”



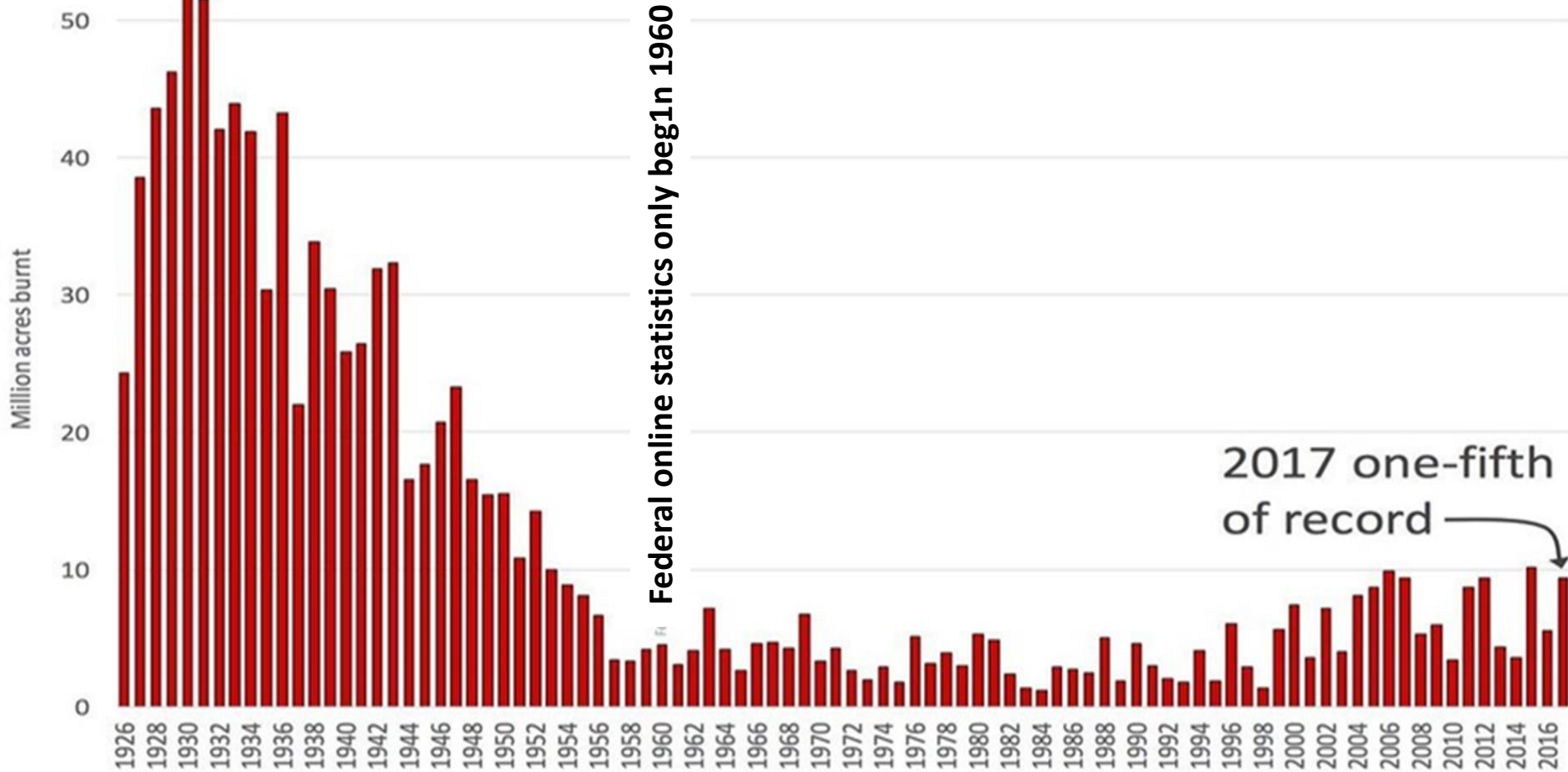
FEMA

No Trends in Floods in USA





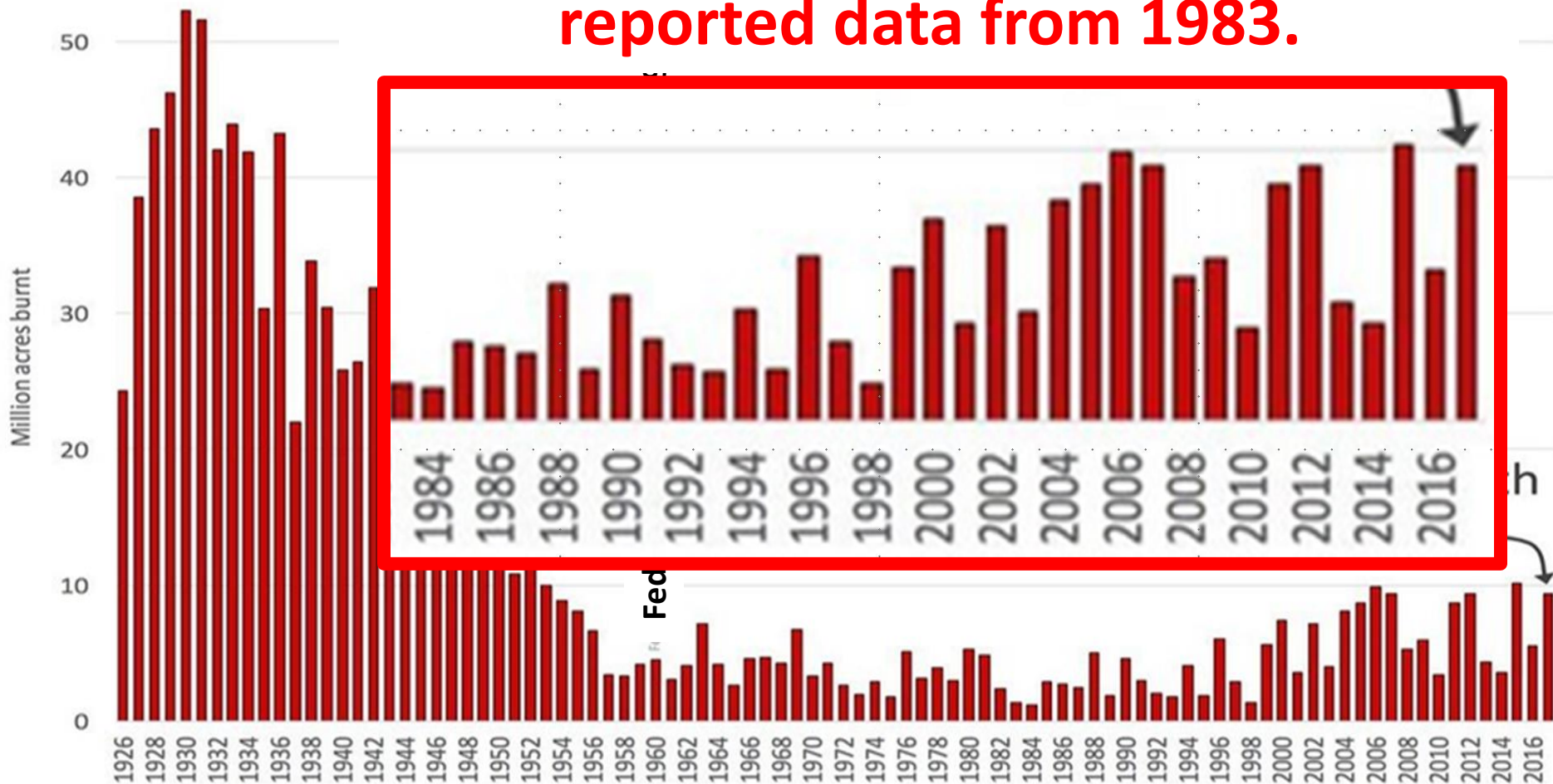
US Forest Area Burned 1926-2017



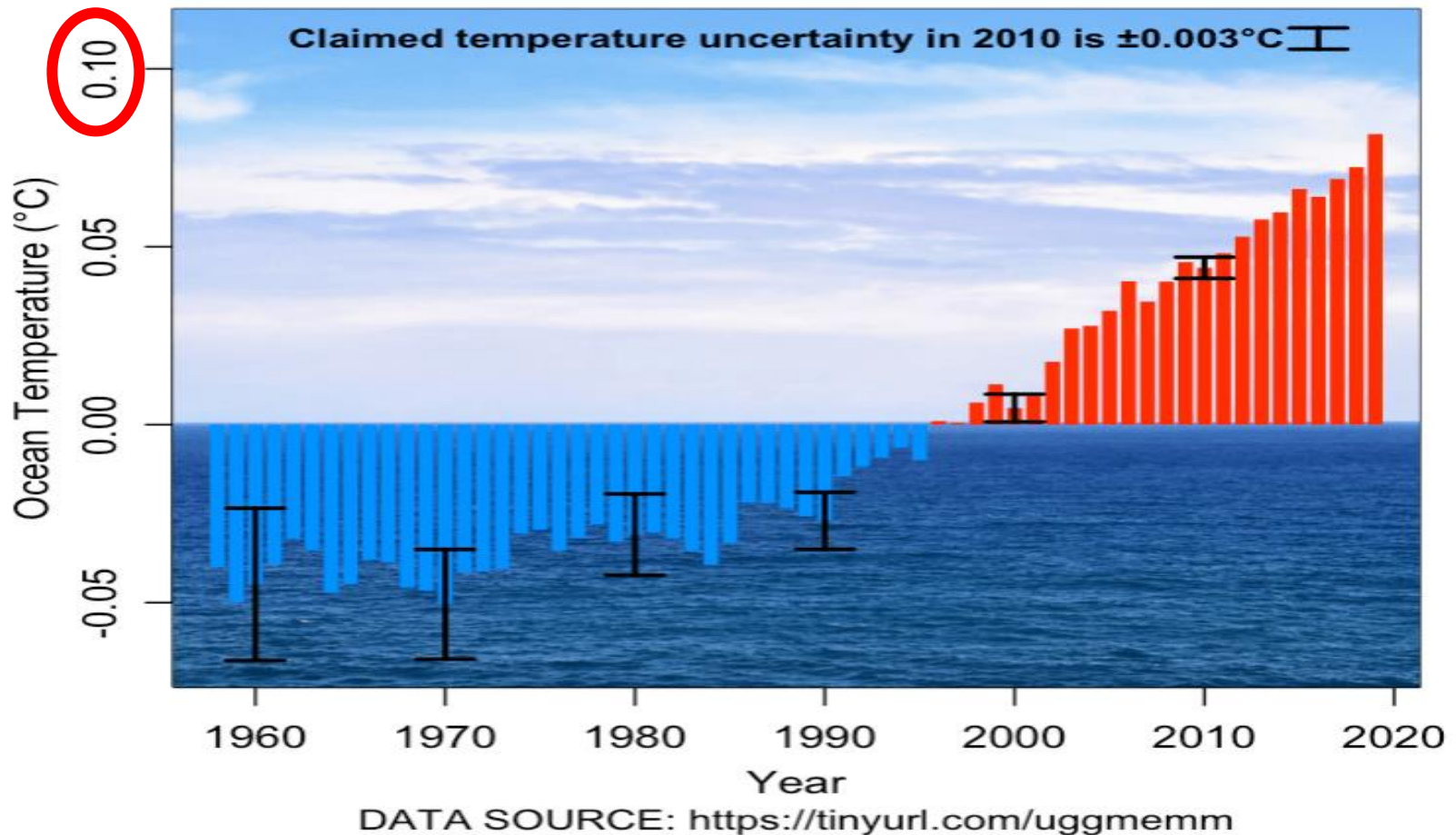


US Forest Area Burned 1926-2017

The 2019 US Climate Assessment only reported data from 1983.



**Ocean Average Temperature to 2000 Metres Depth, from
Cheng et al., "Record-Setting Ocean Warmth Continued in 2019"**



**Over the last 60 years, the top 2000 meters of ocean
have warmed an insignificant tenth of one $^{\circ}\text{C}$.**

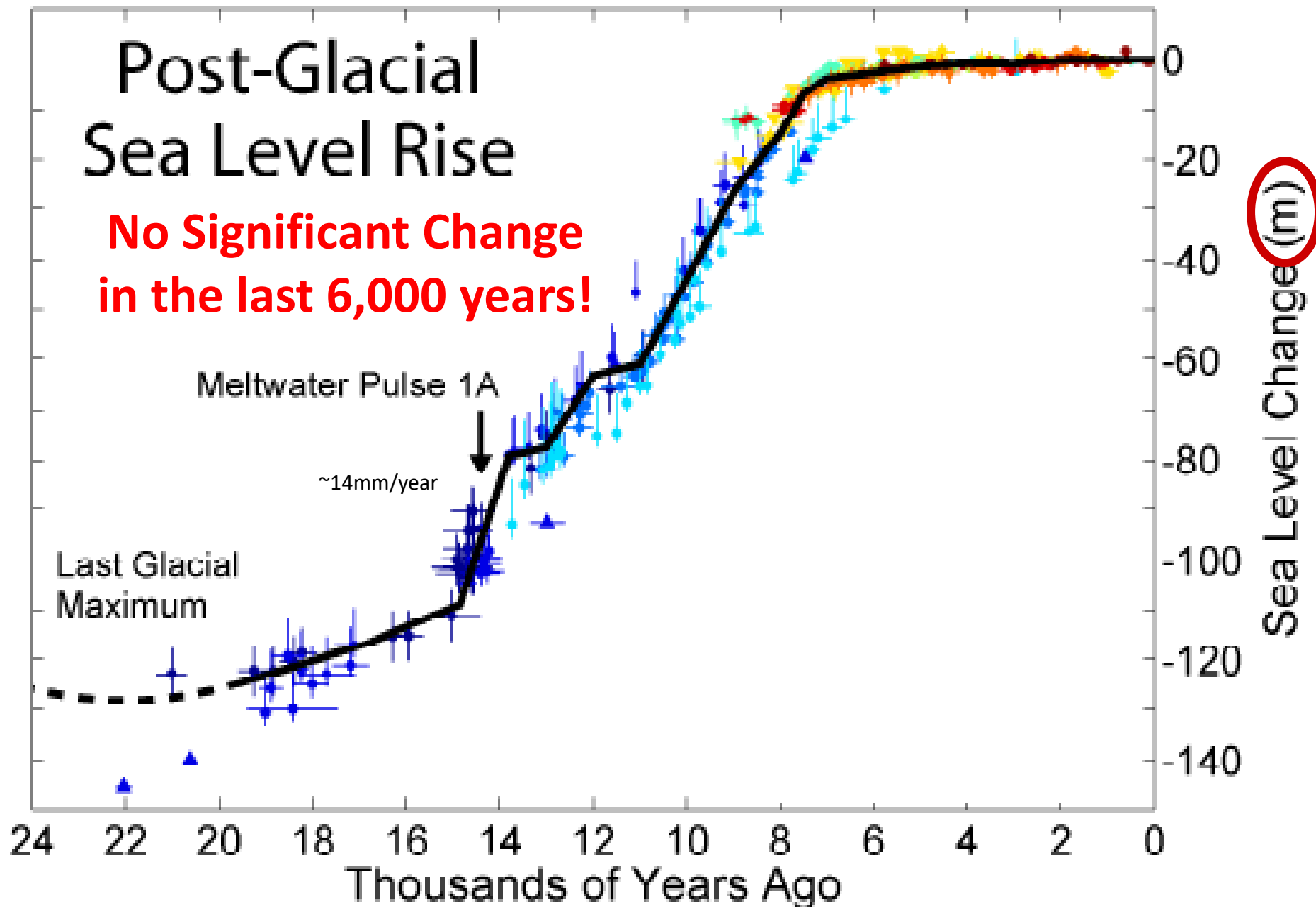
Post-Glacial Sea Level Rise

**No Significant Change
in the last 6,000 years!**

Meltwater Pulse 1A

~14mm/year

Last Glacial
Maximum

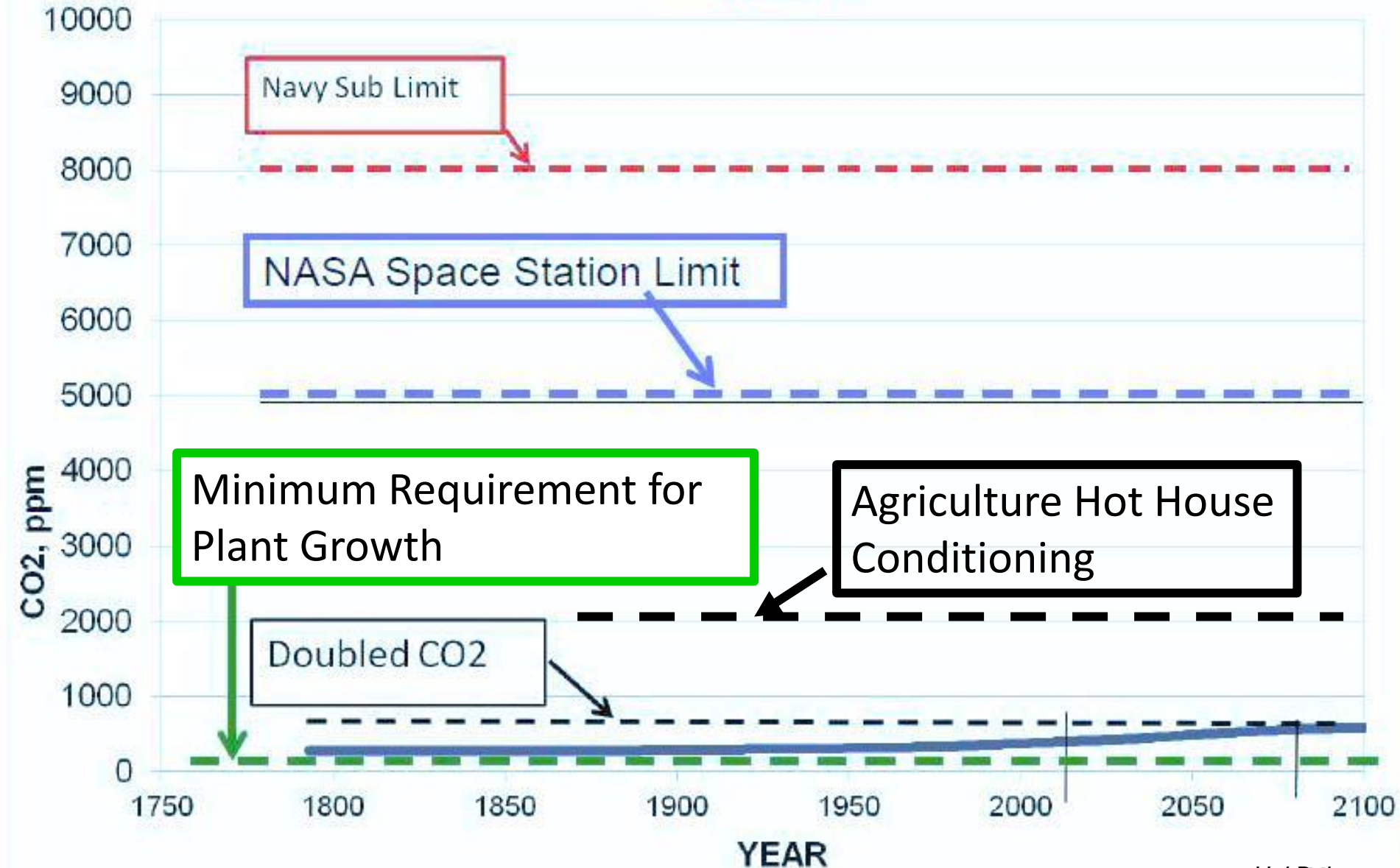


OVERVIEW

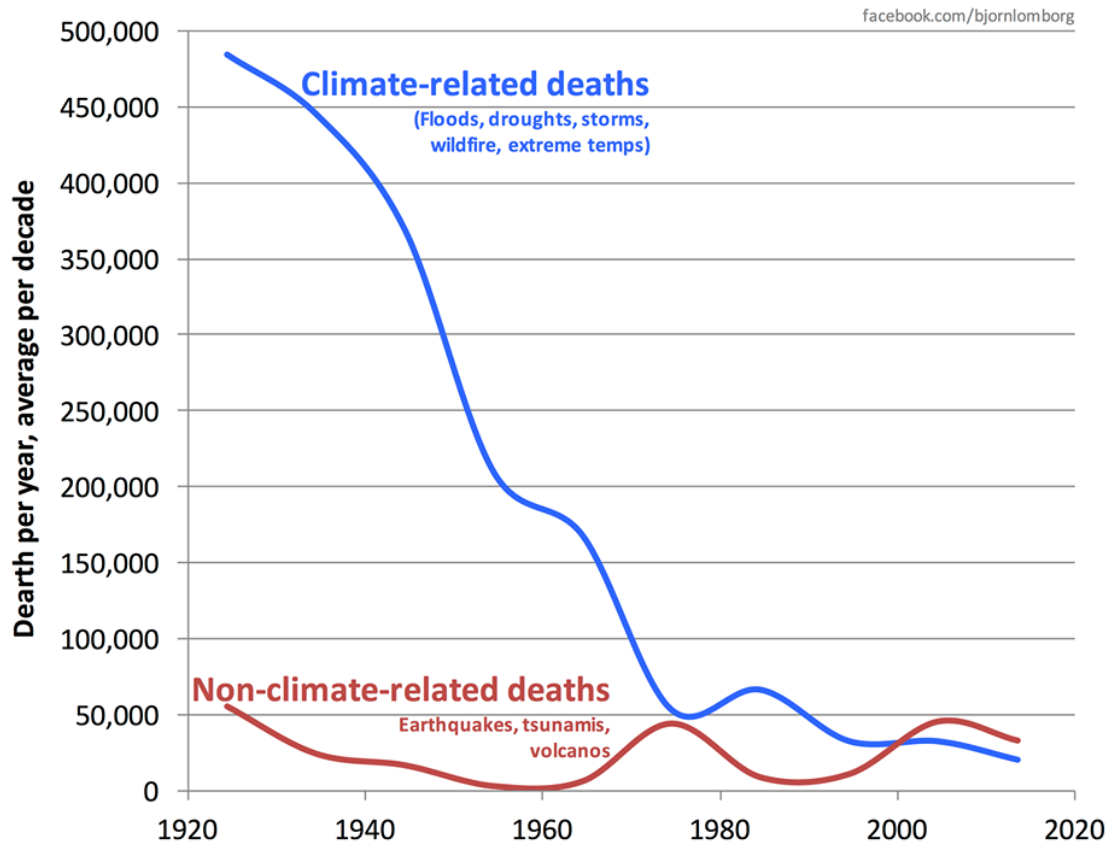
- Human-produced CO₂ contributes insignificantly to global warming. .
The Right Climate Stuff (TRCS) – retired NASA engineers/scientists
- Natural variation plays a much more significant role in climate change
- Over millennia, changes in Earth's orbit, tilt, and wobble control climate.
- The rise in CO₂ has caused a greening of the earth
- CO₂ fertilization has greatly enhanced the production of food.
- Increased CO₂ is not causing weather or sea level extremes!
- **CO₂ is safe, good and not a pollutant!**

CO2 ATMOSPHERIC CONCENTRATION, PPM

— CO2 PPM



Deaths from Climate and non-Climate Catastrophes, 1920-2017



OFDA/CRED International Disaster Database, www.emdat.be, averaged over decades 1920-29, 1930-39, ..., 2010-2017

**Human Prosperity
does not take a
benign climate
and make it
dangerous.**

**It takes a
dangerous climate
and makes it safe.**

Paraphrasing Alex Epstein.

OVERVIEW

- Human-produced CO2 contributes insignificantly to global warming.
The Right Climate Stuff (TRCS) – retired NASA engineers/scientists
- Natural variation plays a much more significant role in climate change
- Over millennia, changes in Earth's orbit, tilt, and wobble control climate.
- The rise in CO2 has caused a greening of the earth
- CO2 fertilization has greatly enhanced the production of food.
- Increased CO2 is not causing weather or sea level extremes!
- CO2 is safe, good and not a pollutant!
- Human-produced CO2 causing **catastrophic** climate change is purely political!

Who Could Be Motivated To Promote Man-Made Global Warming?

- Progressives – One world society and redistribution of wealth.
- Foreign Countries – Financial aide to reduce CO2.
- Wall Street – \$ Billions In Commissions
- Green Industries - \$ Billions In Profits
- Academia – Funded with grants to prove AGW.
- Environmental Extremists Groups – It's a religion.
- Media – The public “buys” catastrophic stories.
- Virtue Signaling – Corporations trying to show their green side to mitigate criticism.

OVERVIEW

- **Human-produced CO2 contributes insignificantly to global warming.**
The Right Climate Stuff (TRCS) – retired NASA engineers/scientists
- **Natural variation plays a much more significant role in climate change**
- **Over millennia, changes in Earth's orbit, tilt, and wobble control climate.**
- **The rise in CO2 has caused a greening of the earth**
- **CO2 fertilization has greatly enhanced the production of food.**
- **Increased CO2 is not causing weather or sea level extremes!**
- **CO2 is safe, good and not a pollutant!**
- **Human-produced CO2 causing catastrophic climate change is purely political!**
- **The public should be made aware of these facts.**