

# **Ojai and Climate Change**

**Presented November 9, 2024 to  
Greater Goods and Common Sense Coalition  
Gregory Wrightstone - Executive Director of the CO2 Coalition**

City of Ojai  
City Council Resolution No. 19-30

CITY OF OJAI

RESOLUTION NO. 19-30

A RESOLUTION OF THE CITY COUNCIL  
OF THE CITY OF OJAI, CALIFORNIA  
ENDORISING THE DECLARATION OF A  
CLIMATE EMERGENCY

# Ojai climate resolution lists fifteen claims of catastrophe that are or will cause great harm

- Destroy civilization
- Kill billions of people
- Human existence threatened
- Accelerating ice mass loss
- 23 feet of sea-level rise
- Increasing extreme weather events have already killed millions of people
  - Wildfires
  - Droughts
  - Floods
  - Famine



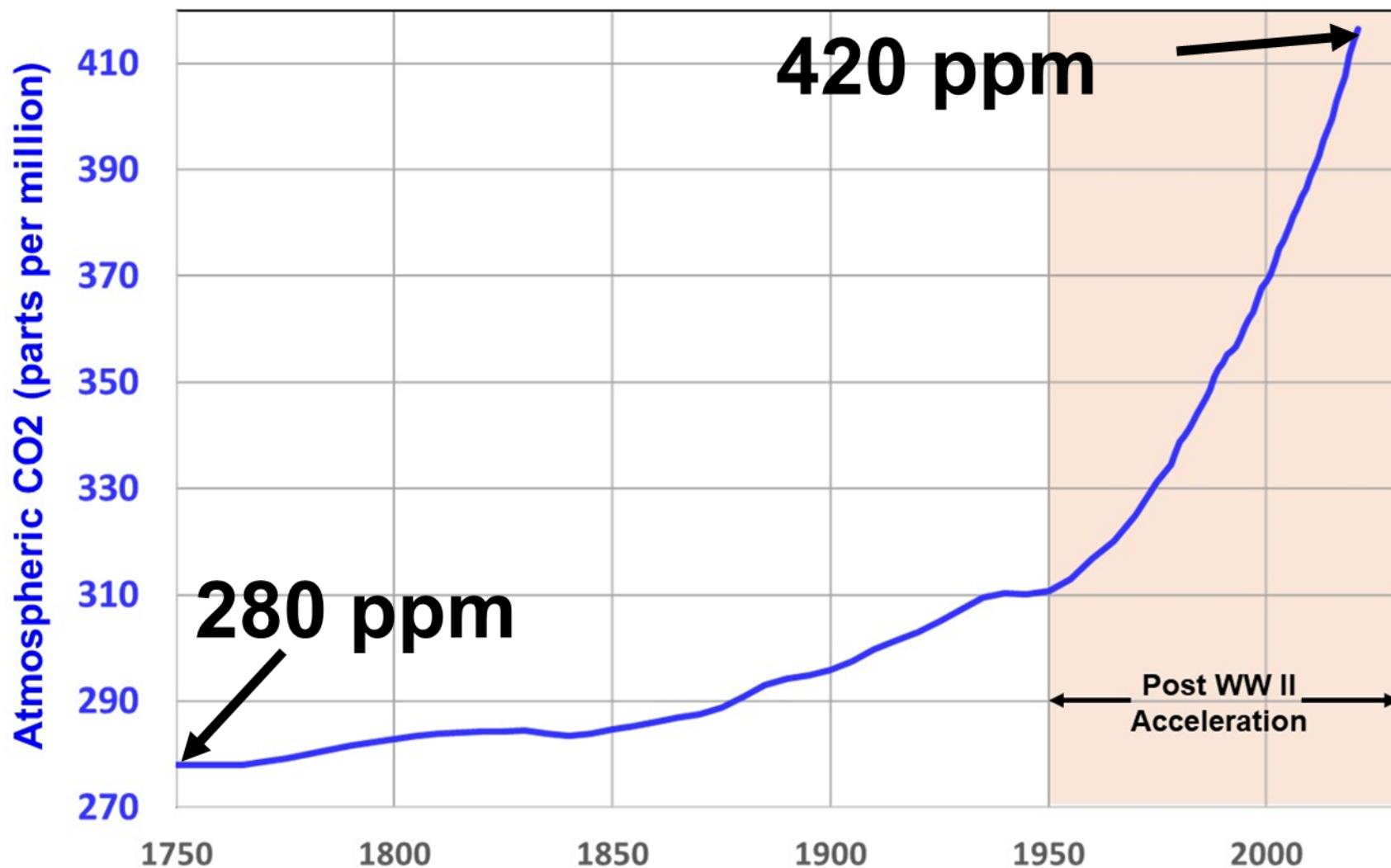
# Ojai Resolution

“The climate crisis will kill billions of people.”

“Climate-fueled extreme weather events,  
wildfires, droughts, floods, rising seas,  
famines, and diseases  
fueled have already killed millions of  
people...and early death on an  
increasingly uninhabitable planet”

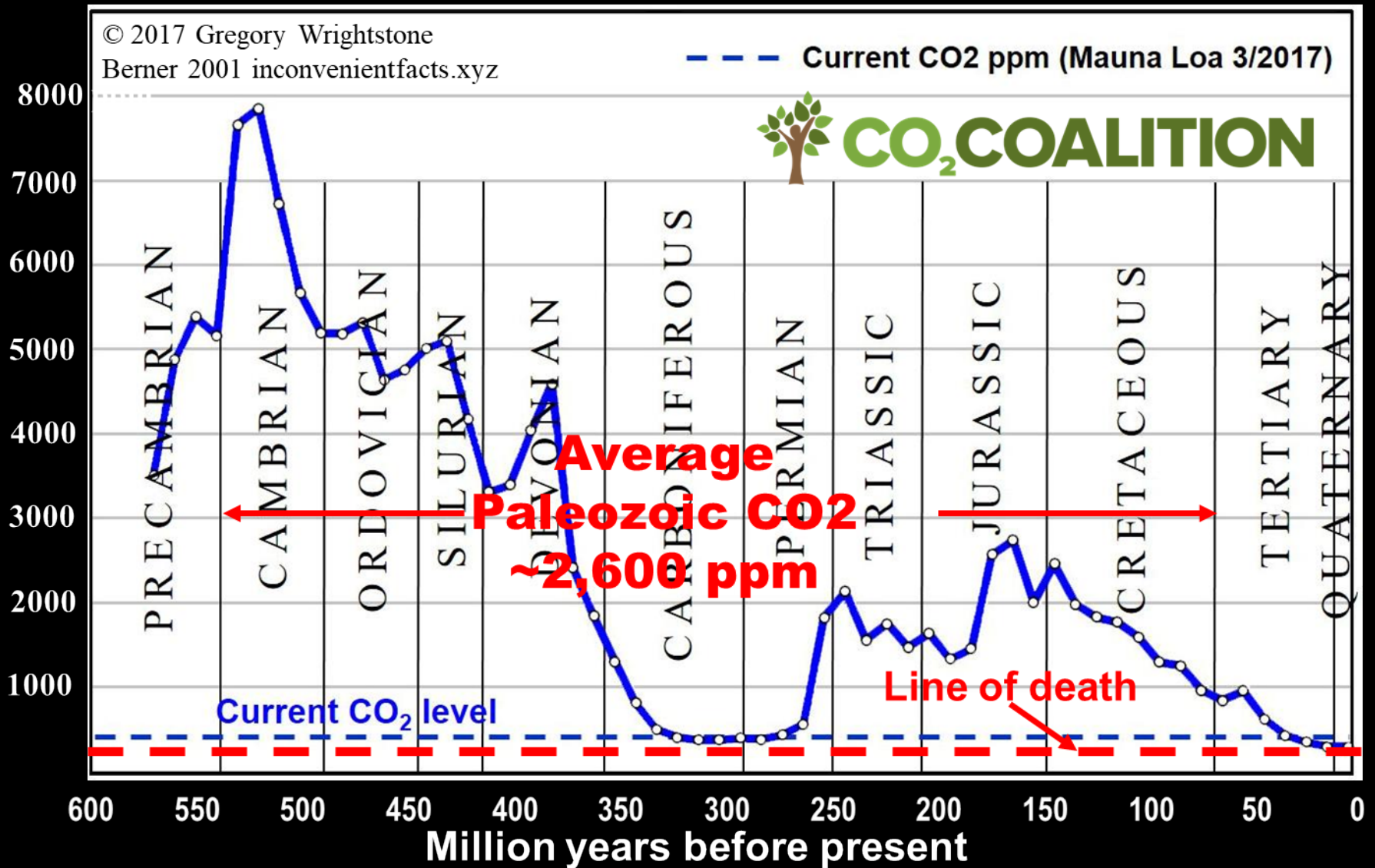


# Carbon Dioxide



In climate science  
a long-term geologic context is  
important

**Fig I-13: 600 million years of CO<sub>2</sub> data reveals current CO<sub>2</sub> starvation**



Berner RA, Kothavala Z (2001) GEOCARB III: A revised model of atmospheric CO<sub>2</sub> over Phanerozoic time, IGBP PAGES and World Data Center for Paleoclimatology, Data Contribution Series # 2002-051. NOAA/NGDC Paleoclimatology Program, Boulder CO, USA

# Ojai Resolution

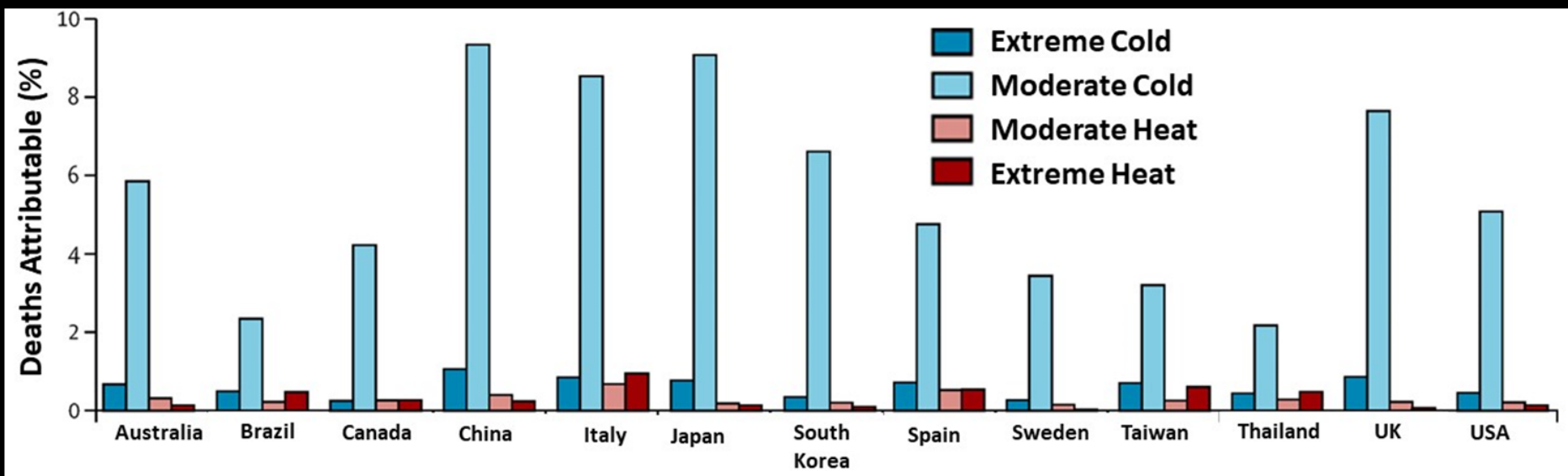
“The climate crisis will kill billions of people.”

“Climate-fueled extreme weather events, wildfires, droughts, floods, rising seas, famines, and diseases fueled have already killed millions of people...and early death on an increasingly uninhabitable planet”

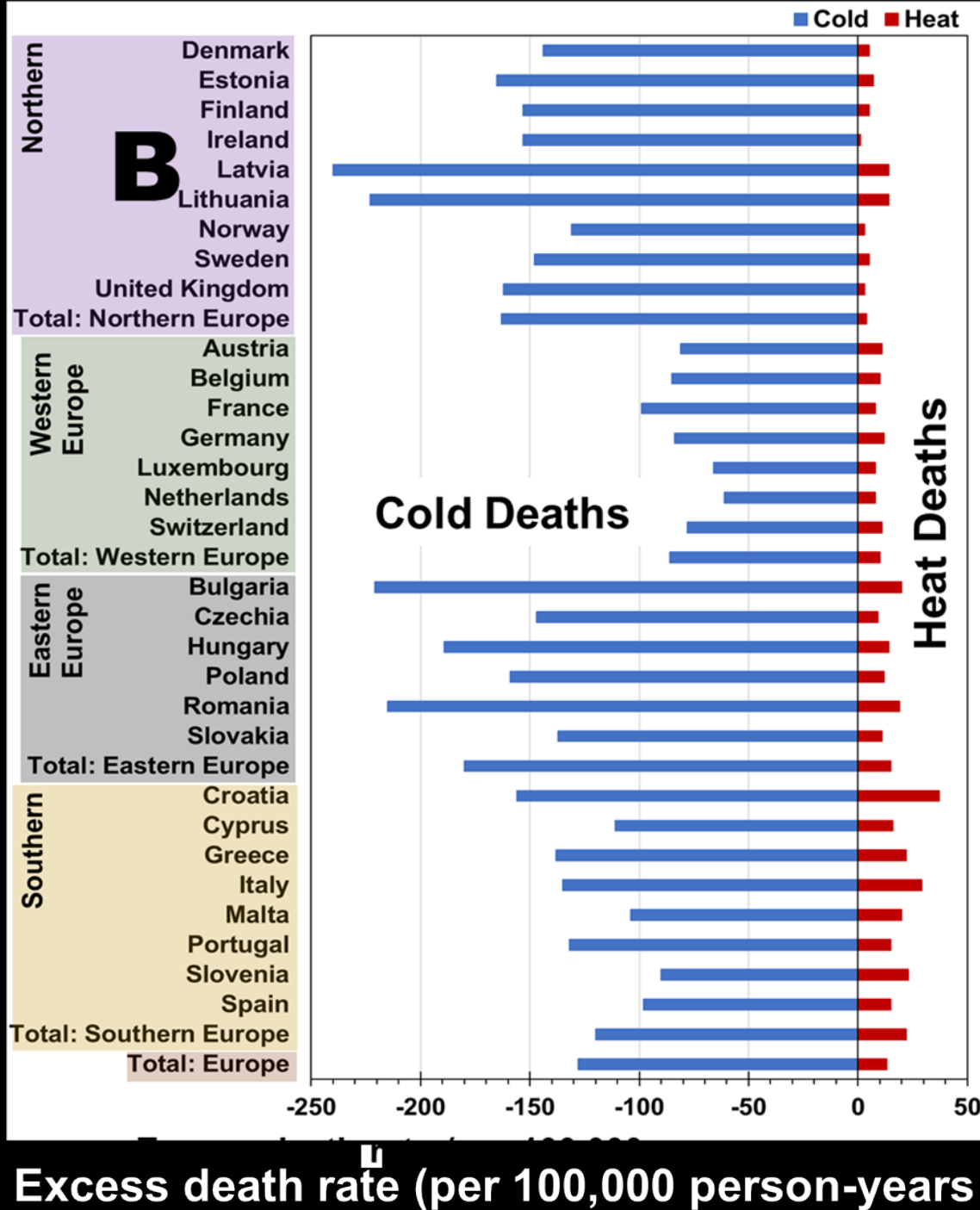


# Welcome the Warmth... Fear the Cold

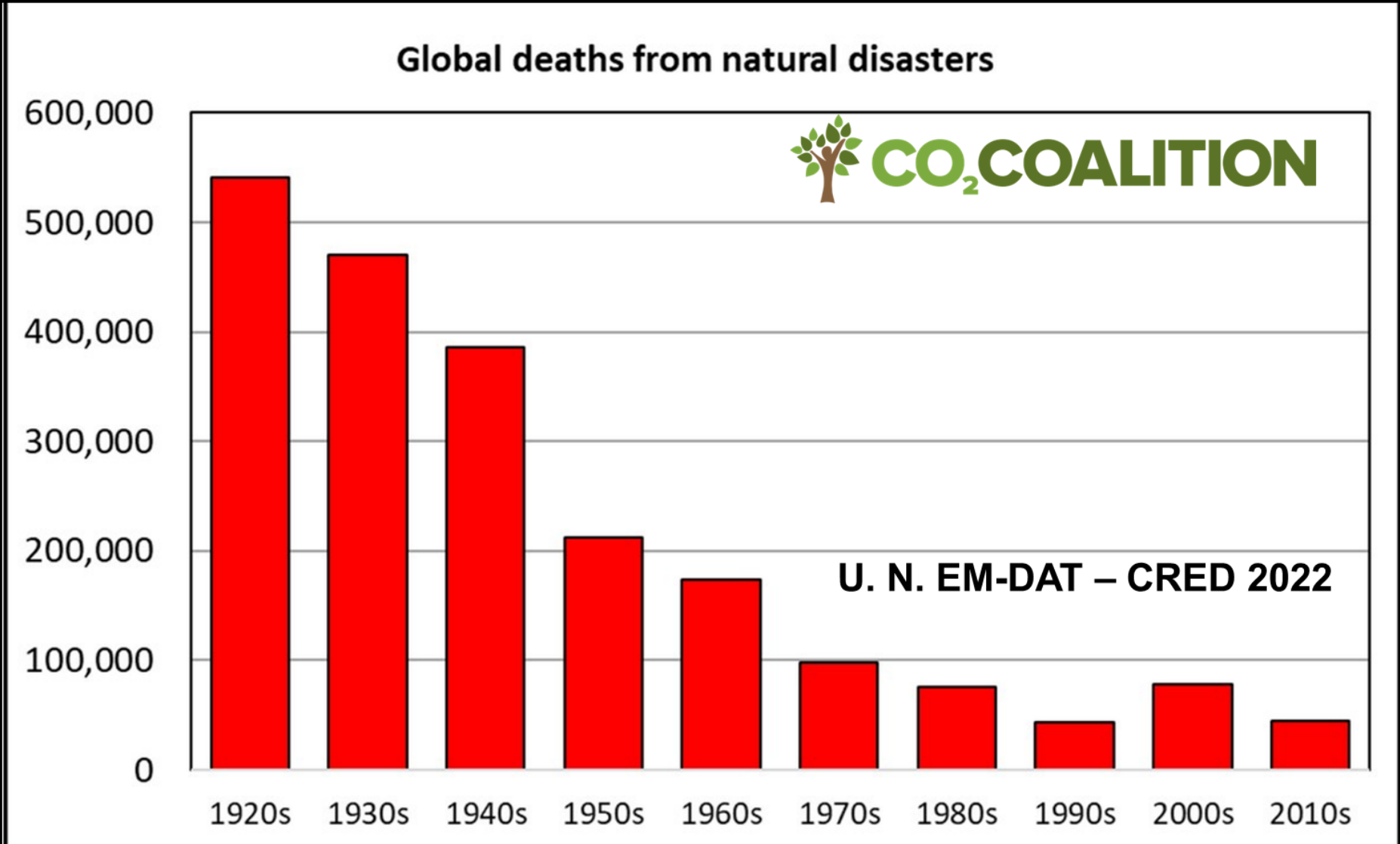
## Cold kills 15 to 20 times as many as heat



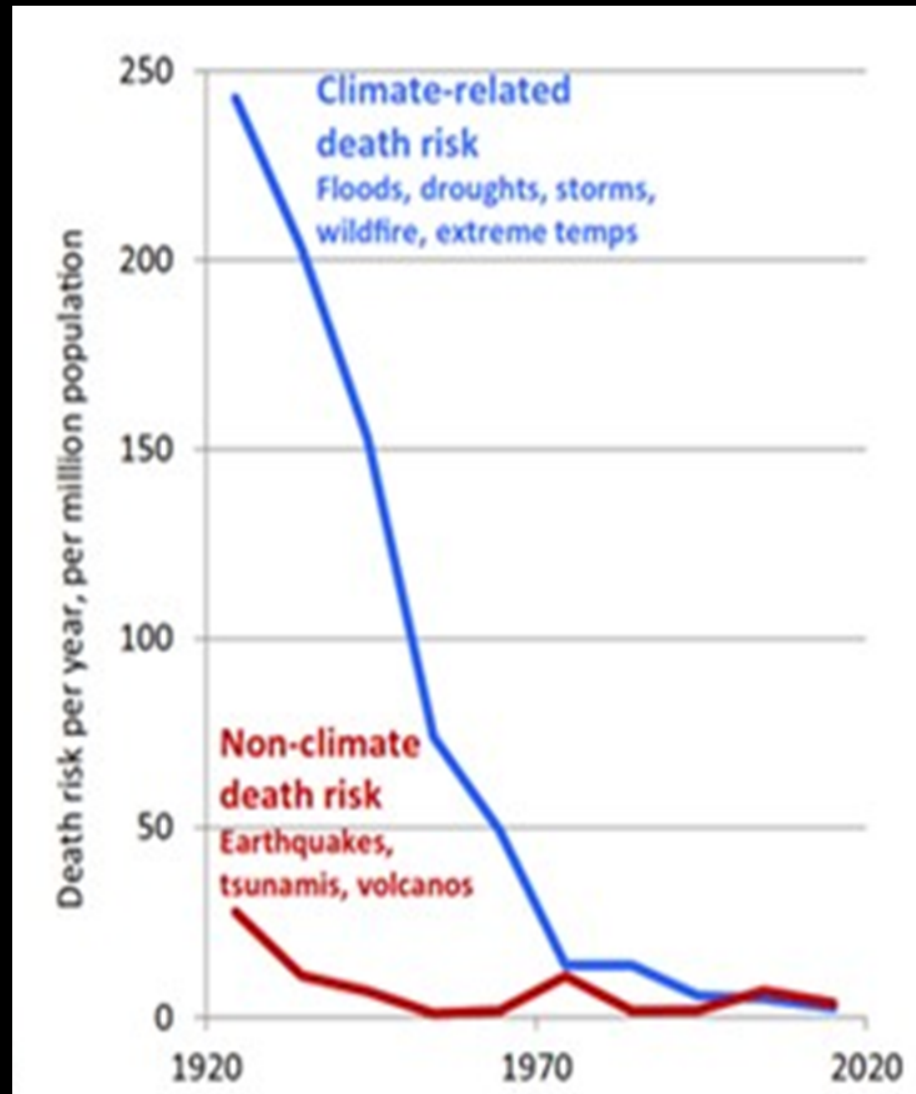
**Most recent study: More than 10 times as many die from cold as heat**



# Natural Disaster Deaths in Steep Decline



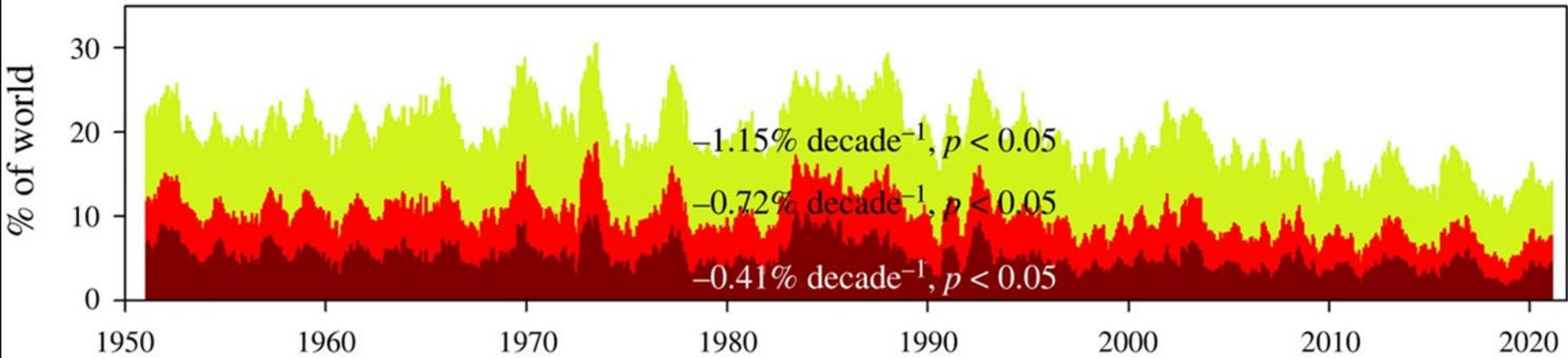
# Natural Disaster Deaths in Steep Decline



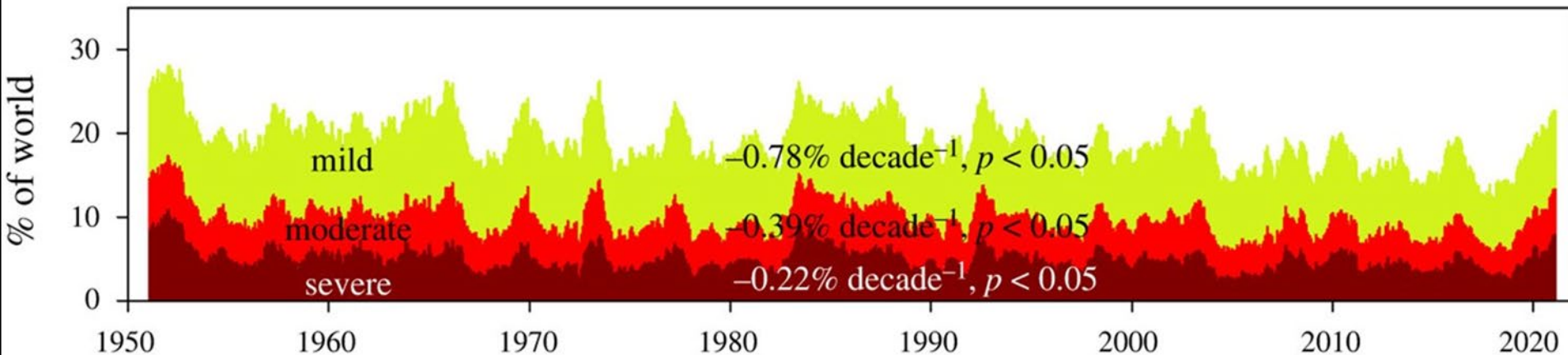


# Drought Globally in Significant Decline

Climatic Research Unit 12-month precipitation index



Global Precipitation Climatology Center 12-month precipitation index

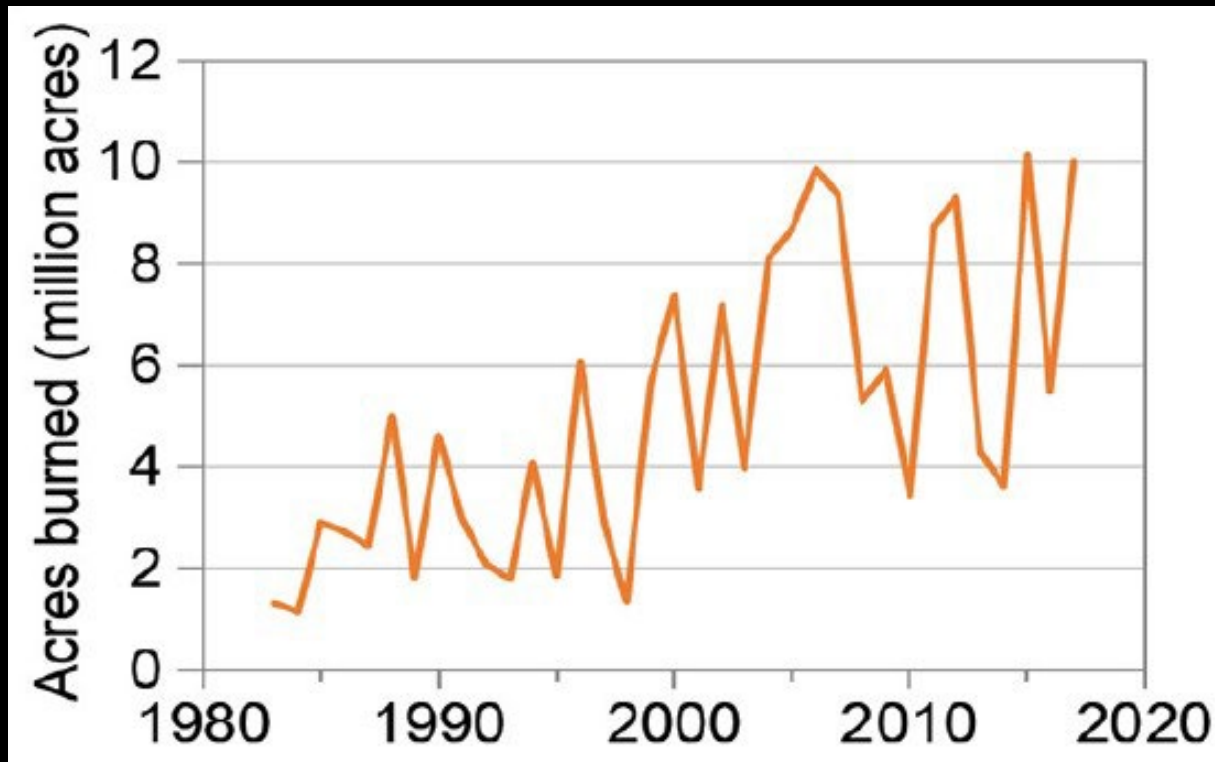


# Ojai Resolution

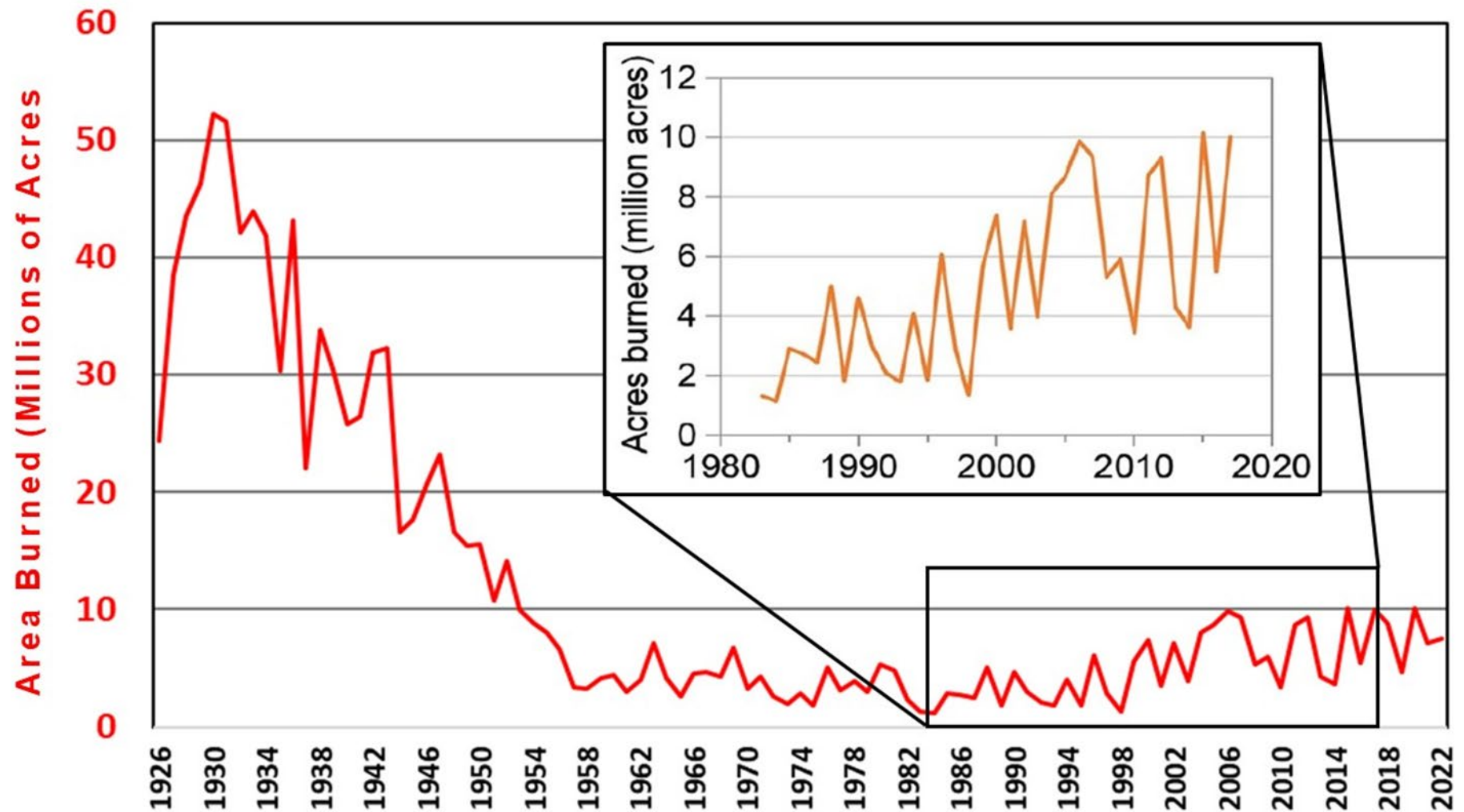
## Claim of increasing wildfire

“Climate-fueled extreme weather events, **wildfires**, droughts, floods, rising seas, famines, and diseases

## 4<sup>th</sup> National Climate Assessment Burned Area

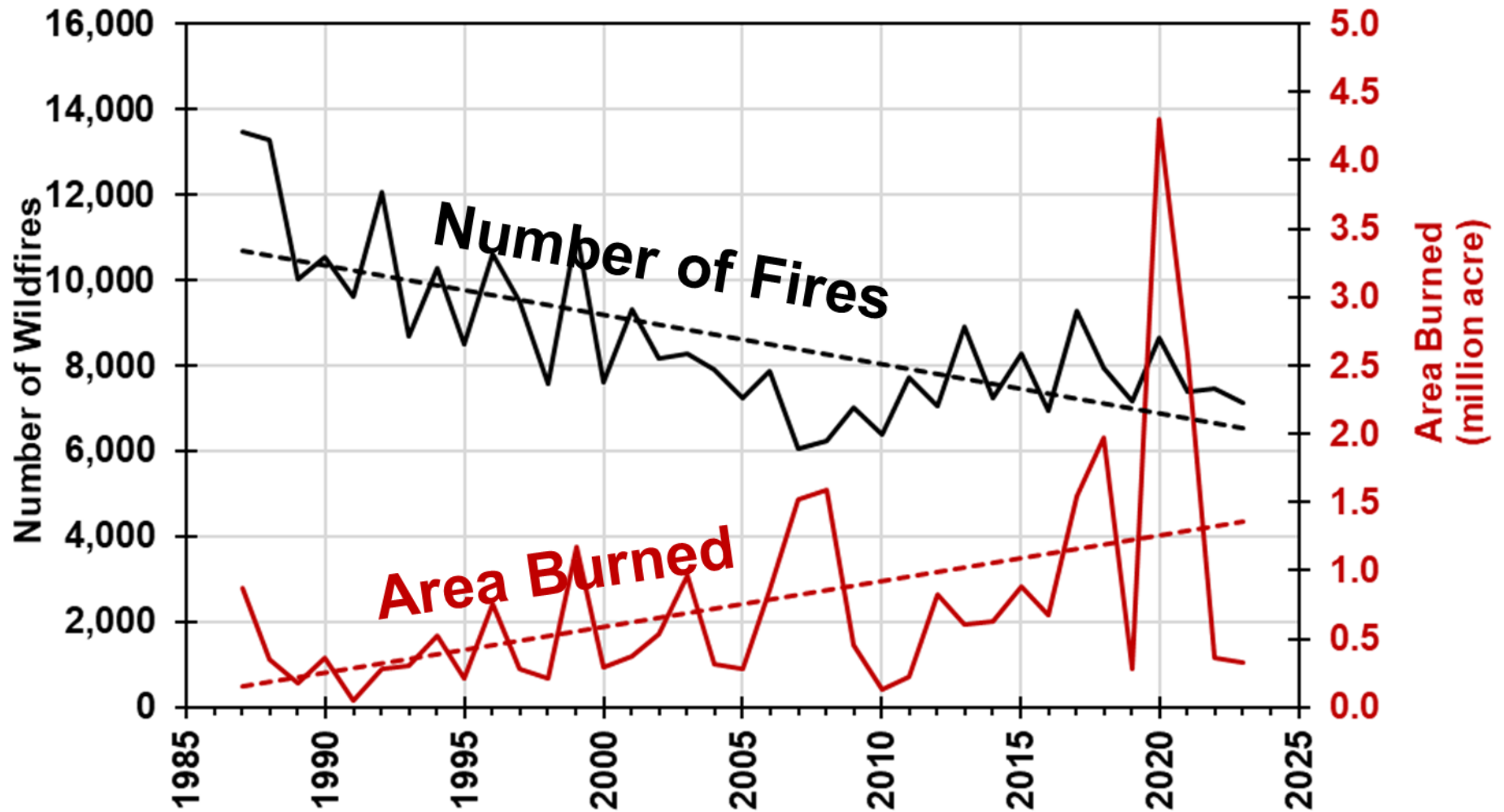


# NIFC 2023 – Area burned



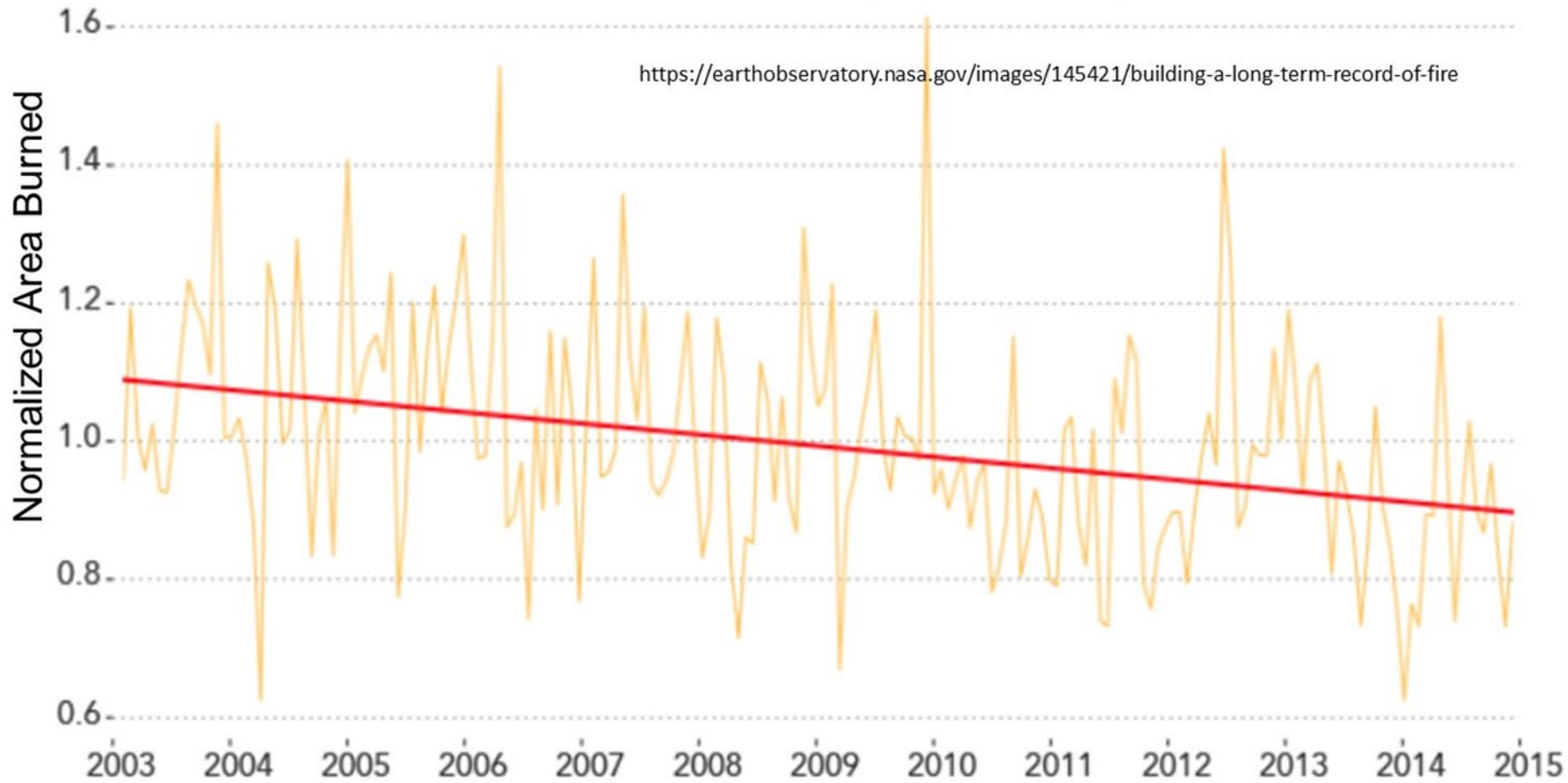


# California Wildfires



# Global Wildfires – Copernicus Satellite

## Global Burned Area (2003-2015)



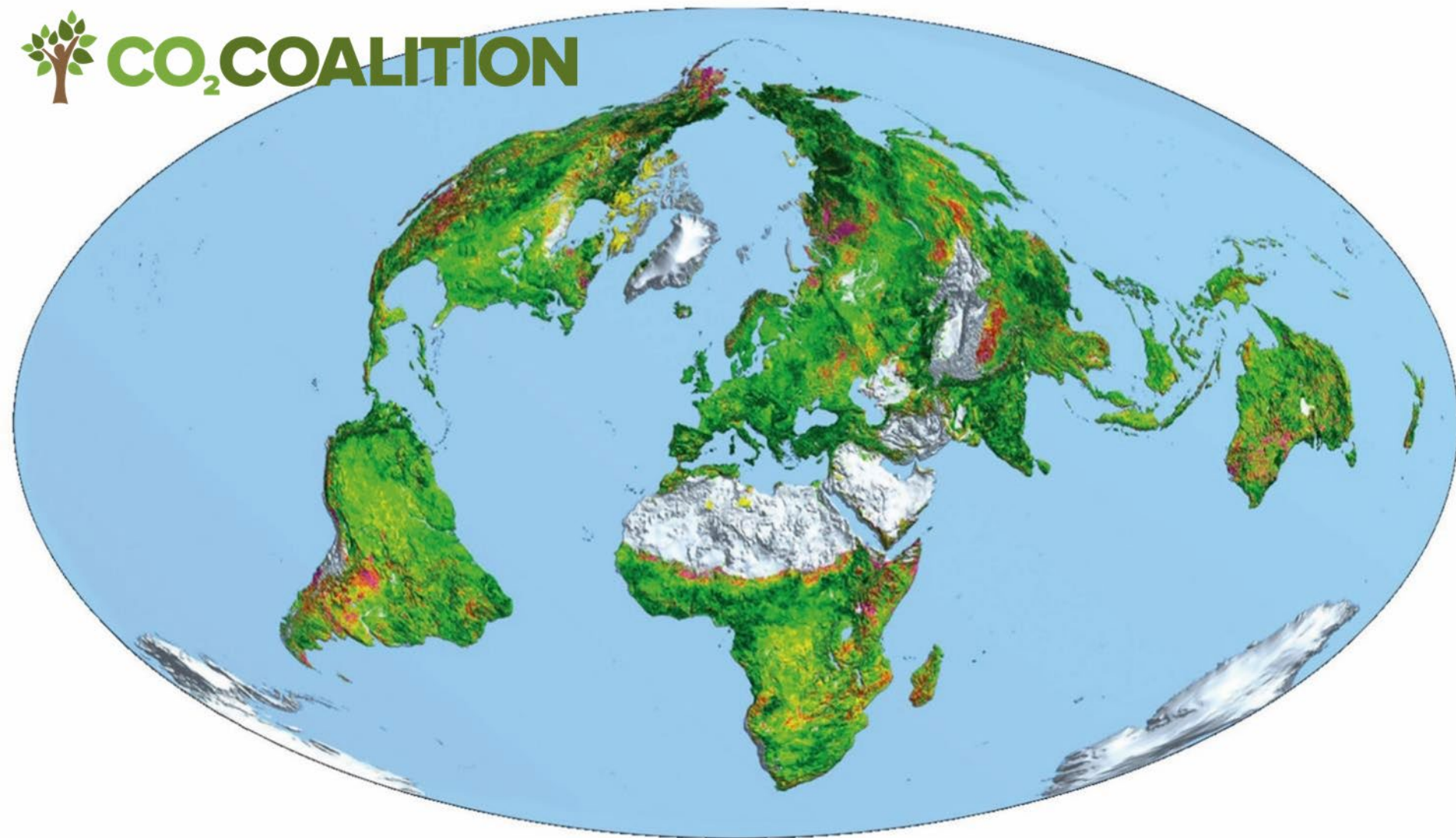
# Ojai Resolution

## Claim of Famine and Starvation

“Climate-fueled extreme weather events,  
wildfires, droughts, floods, rising seas,  
**famines**, and diseases

**Vegetation and Agricultural  
Production are Expanding**

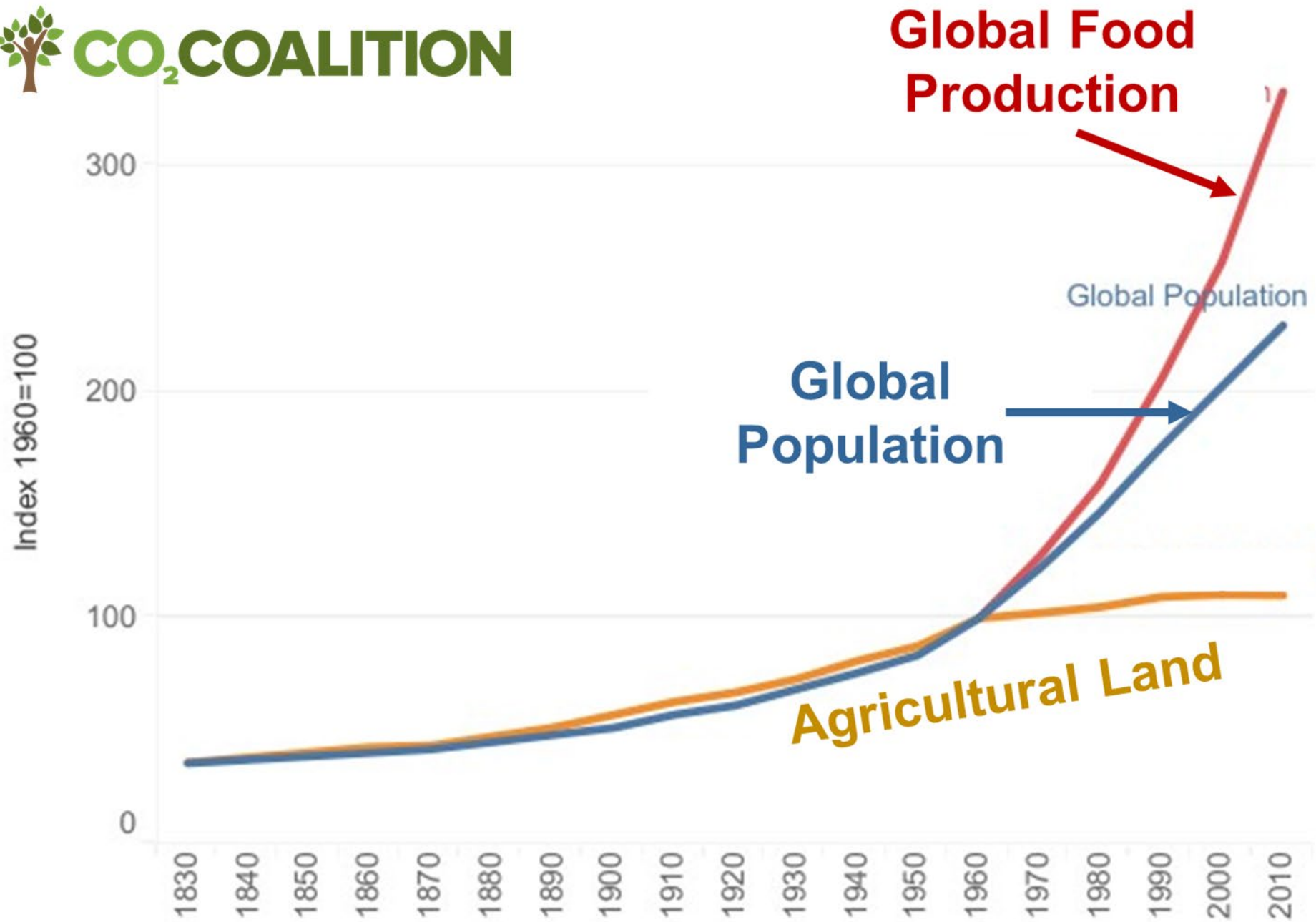


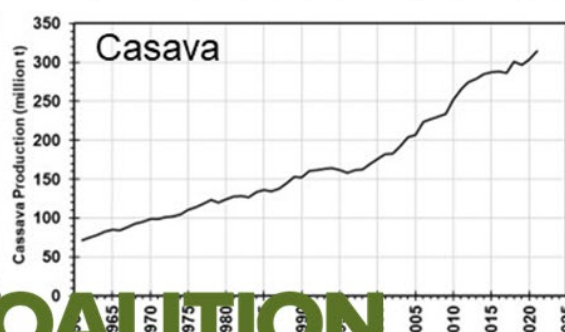
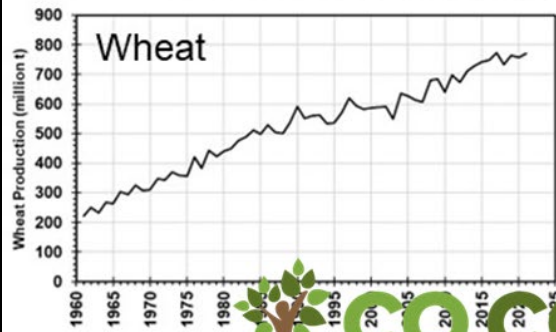
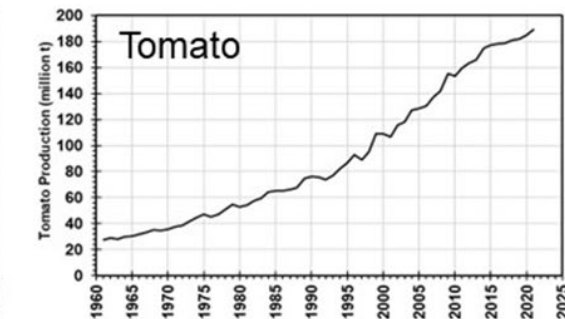
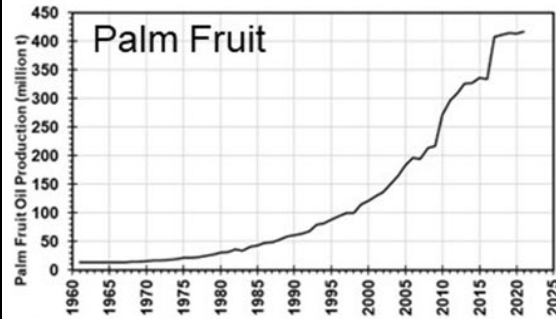
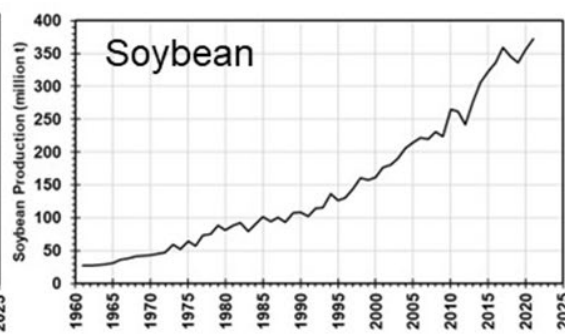
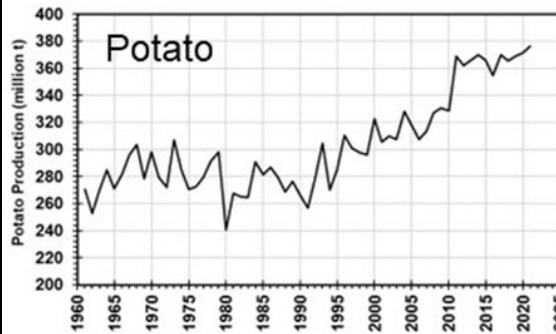
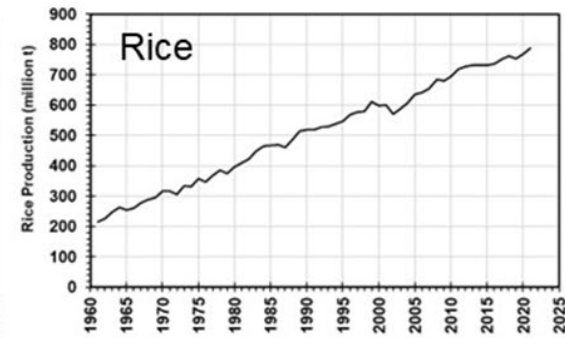
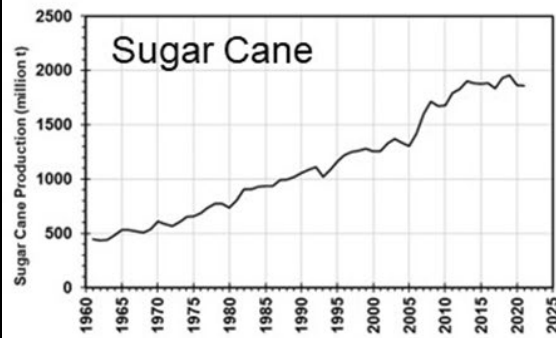


**Change in leaf area, 1982-2015**



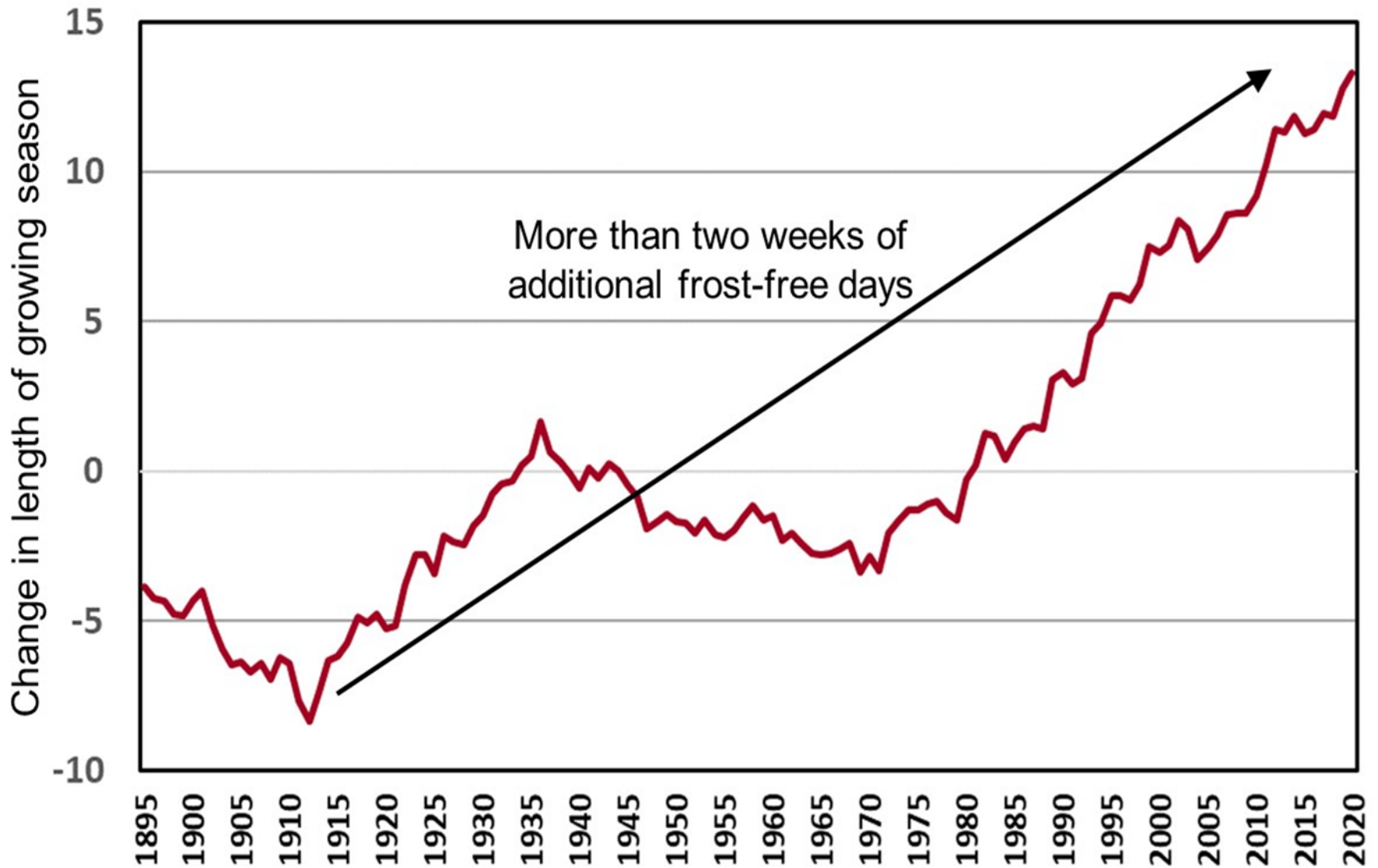
# Global food production, population and agricultural land use





CO<sub>2</sub> COALITION

# Growing season is lengthening



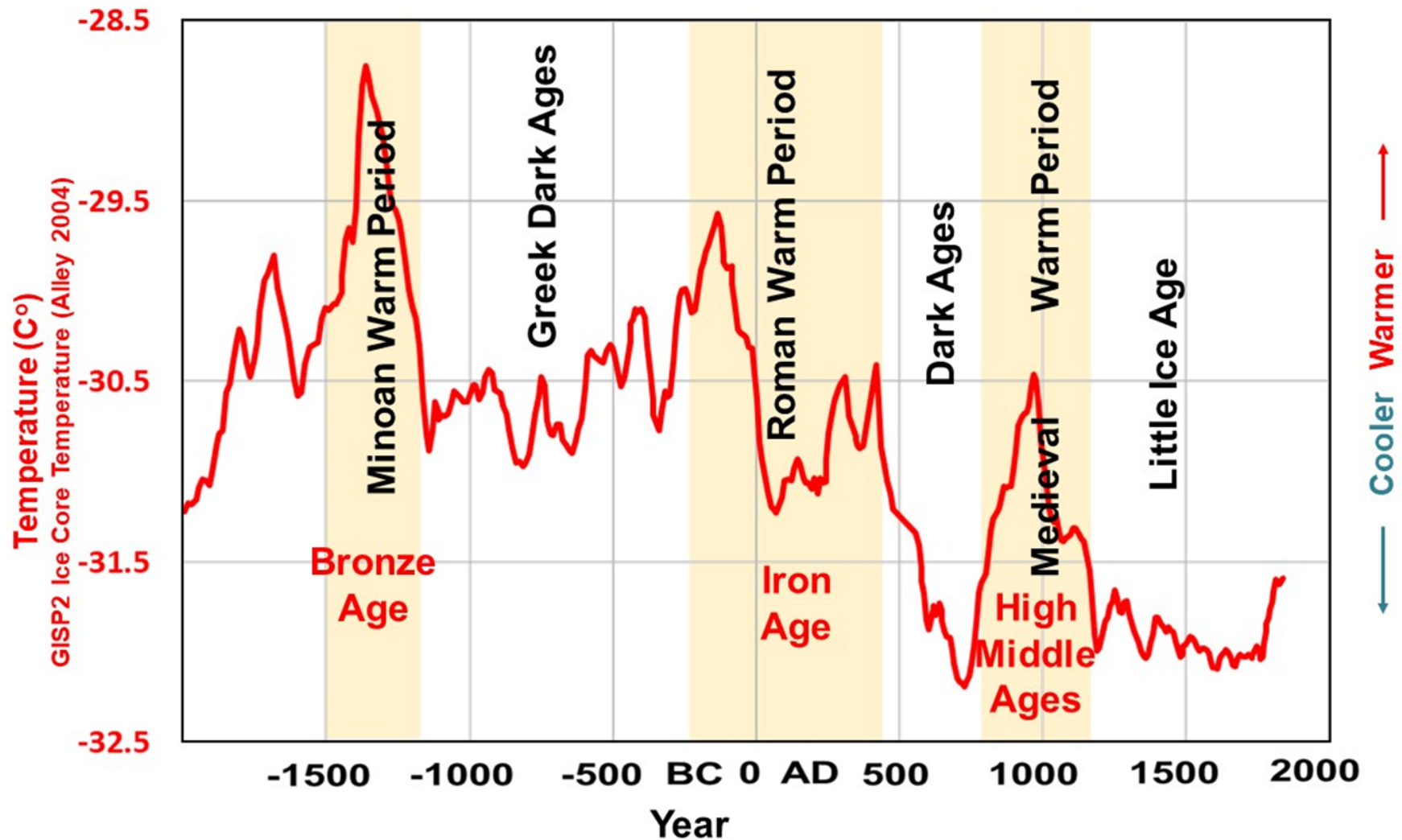
# Ojai Resolution

“...accelerating ice mass loss that will result in sea level rise... complete melting of the Greenland Ice Sheet... would lead to 23 feet of sea-level rise...”



# Greenland Average Temperature: -31.5 °C or -24.7 °F

That would require an increase of 57 degrees F to melt





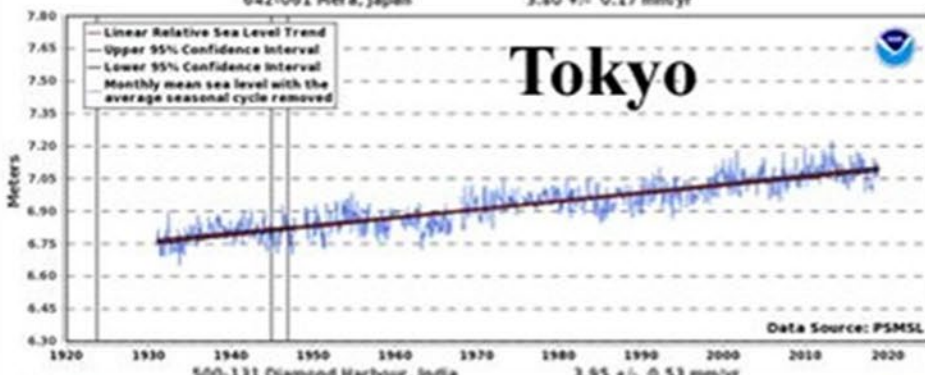
# Sea Level Rise at Six of the World's Largest Cities

## Slow and Steady

642-061 Mera, Japan

3.80 +/- 0.17 mm/yr

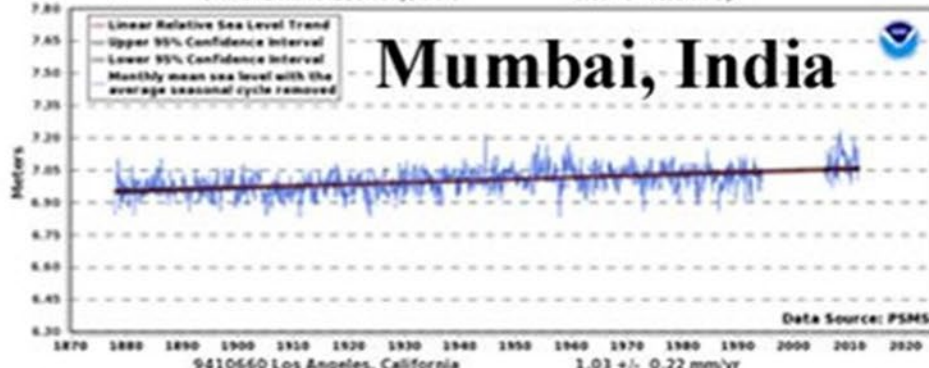
### Tokyo



500-041 Mumbai/Bombay, India

0.80 +/- 0.09 mm/yr

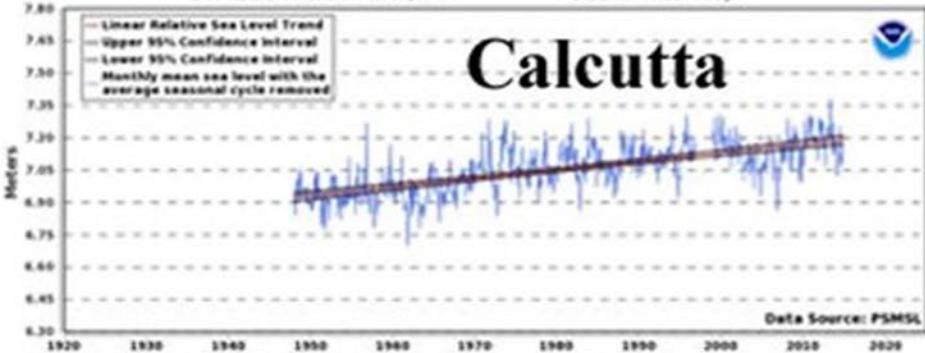
### Mumbai, India



500-131 Diamond Harbour, India

3.95 +/- 0.53 mm/yr

### Calcutta



9410660 Los Angeles, California

1.03 +/- 0.22 mm/yr

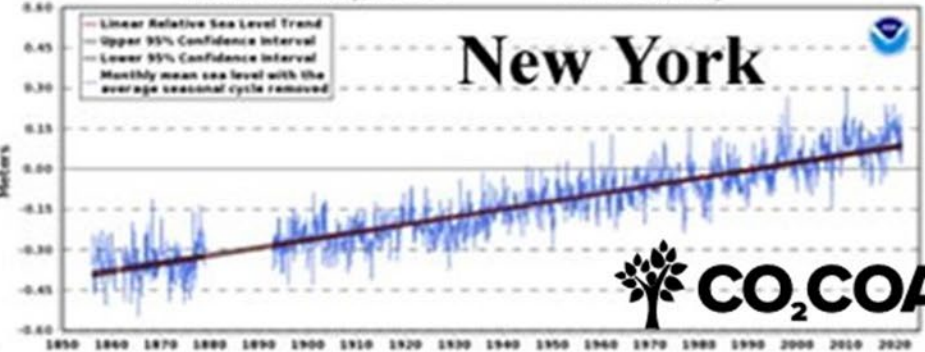
### Los Angeles



8518750 The Battery, New York

2.88 +/- 0.09 mm/yr

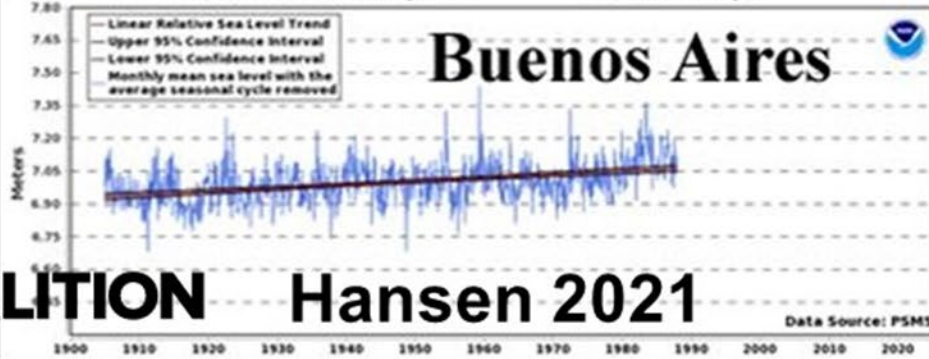
### New York



860-151 Buenos Aires, Argentina

1.57 +/- 0.30 mm/yr

### Buenos Aires



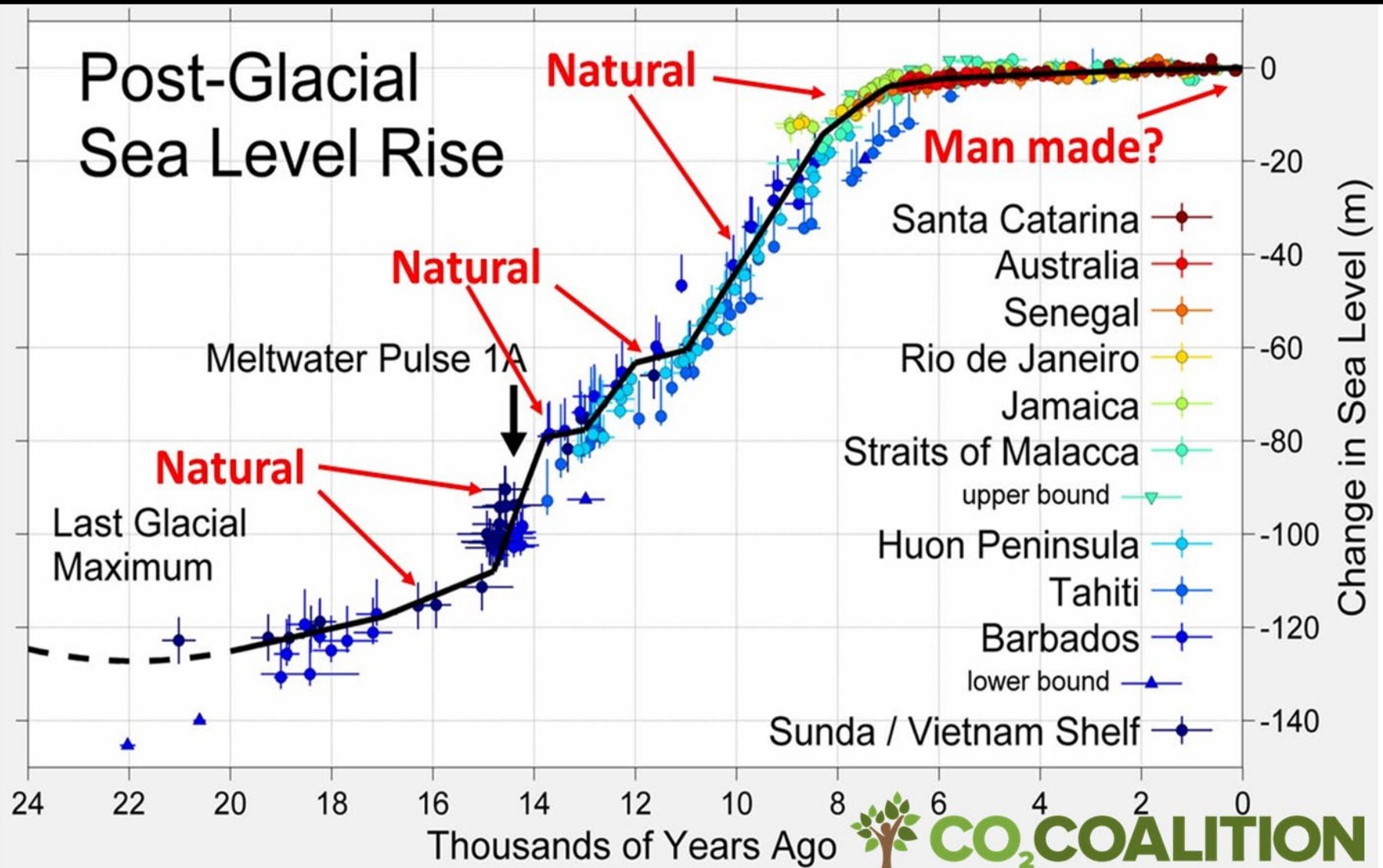
CO<sub>2</sub> COALITION

Hansen 2021

# Maldives – Most “at risk” island nation



# Sea-level has risen 400 feet in the last 15,000 years

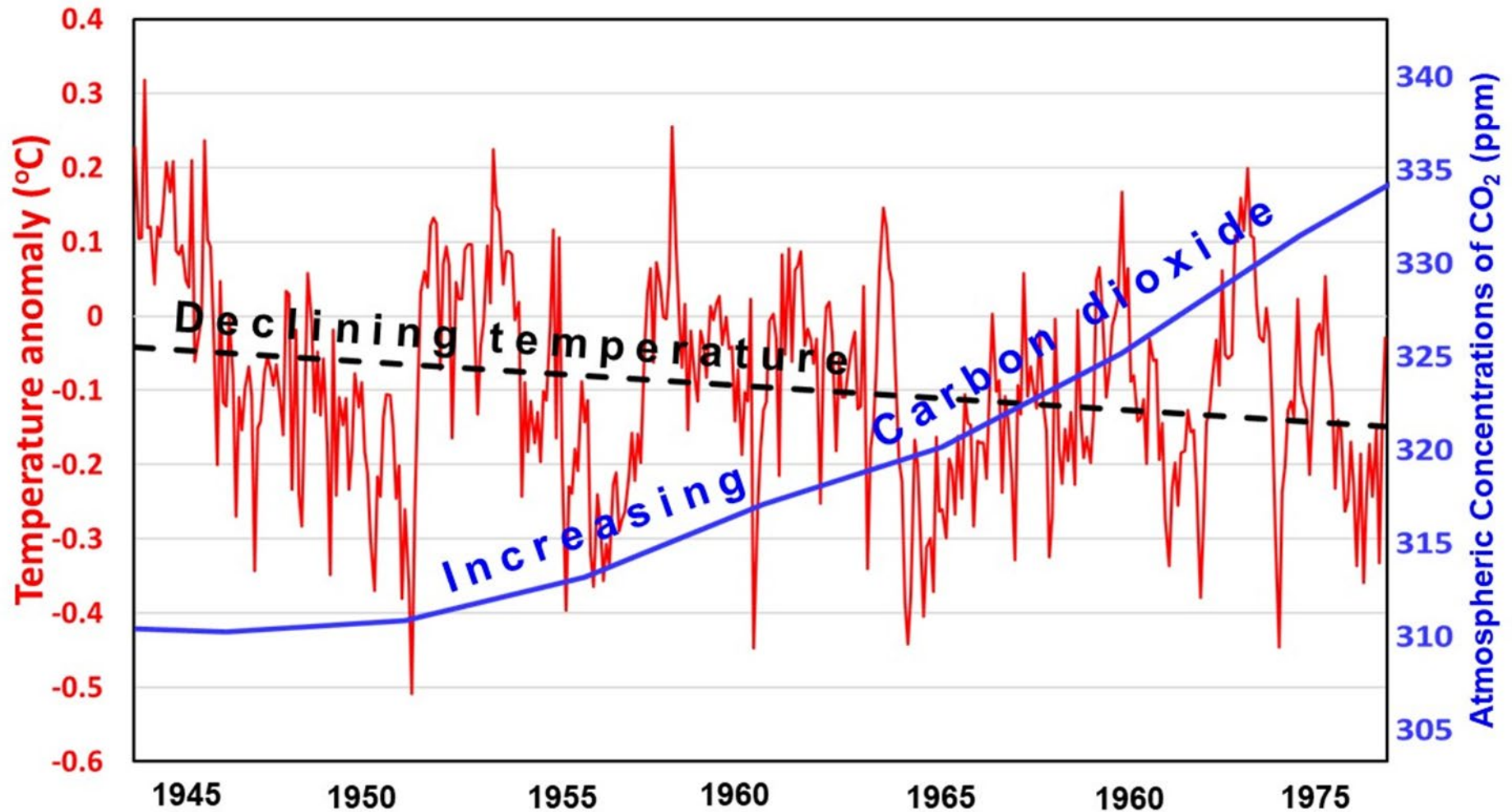


CO<sub>2</sub> vs. Temperature

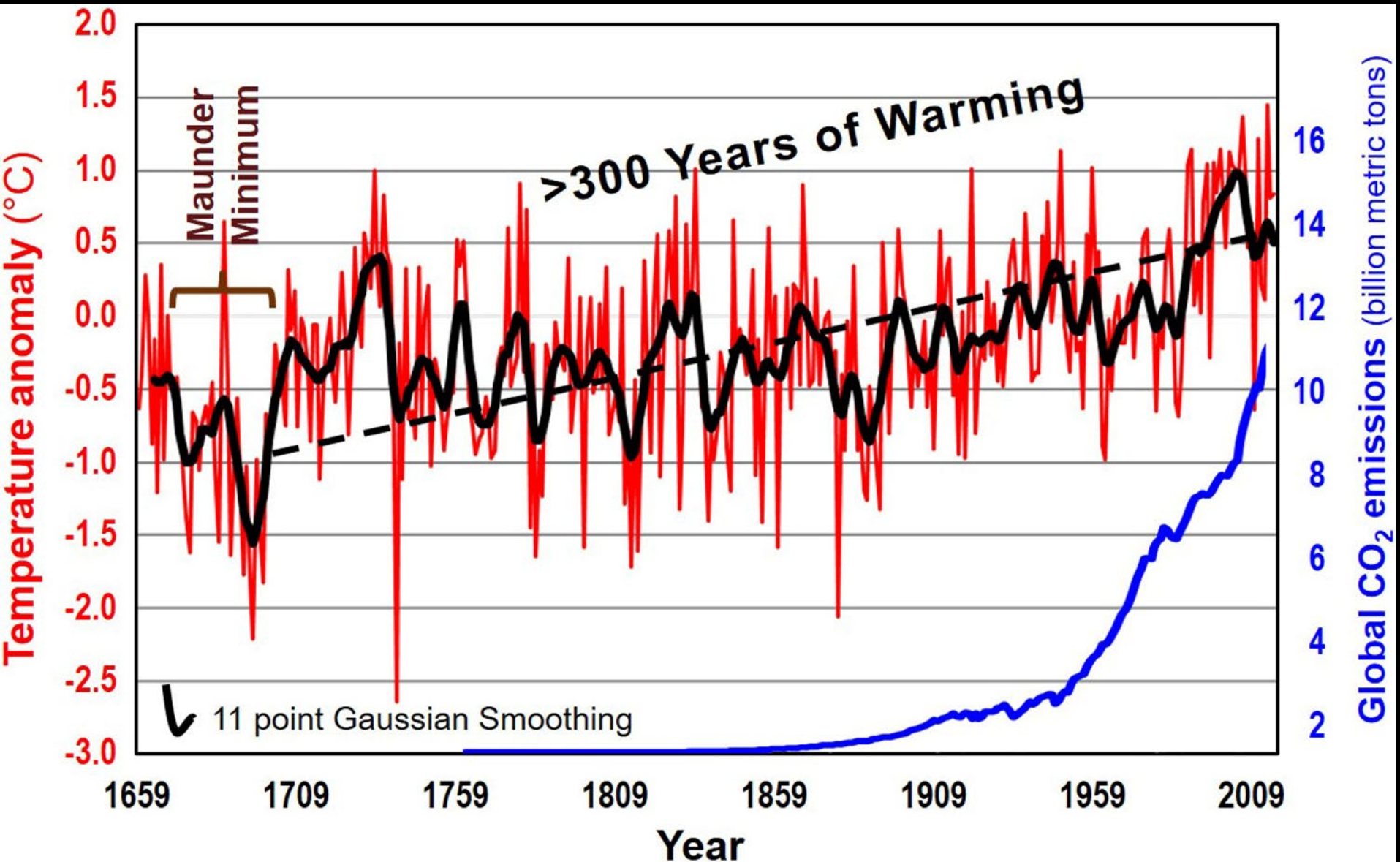


# 1945 to 1978

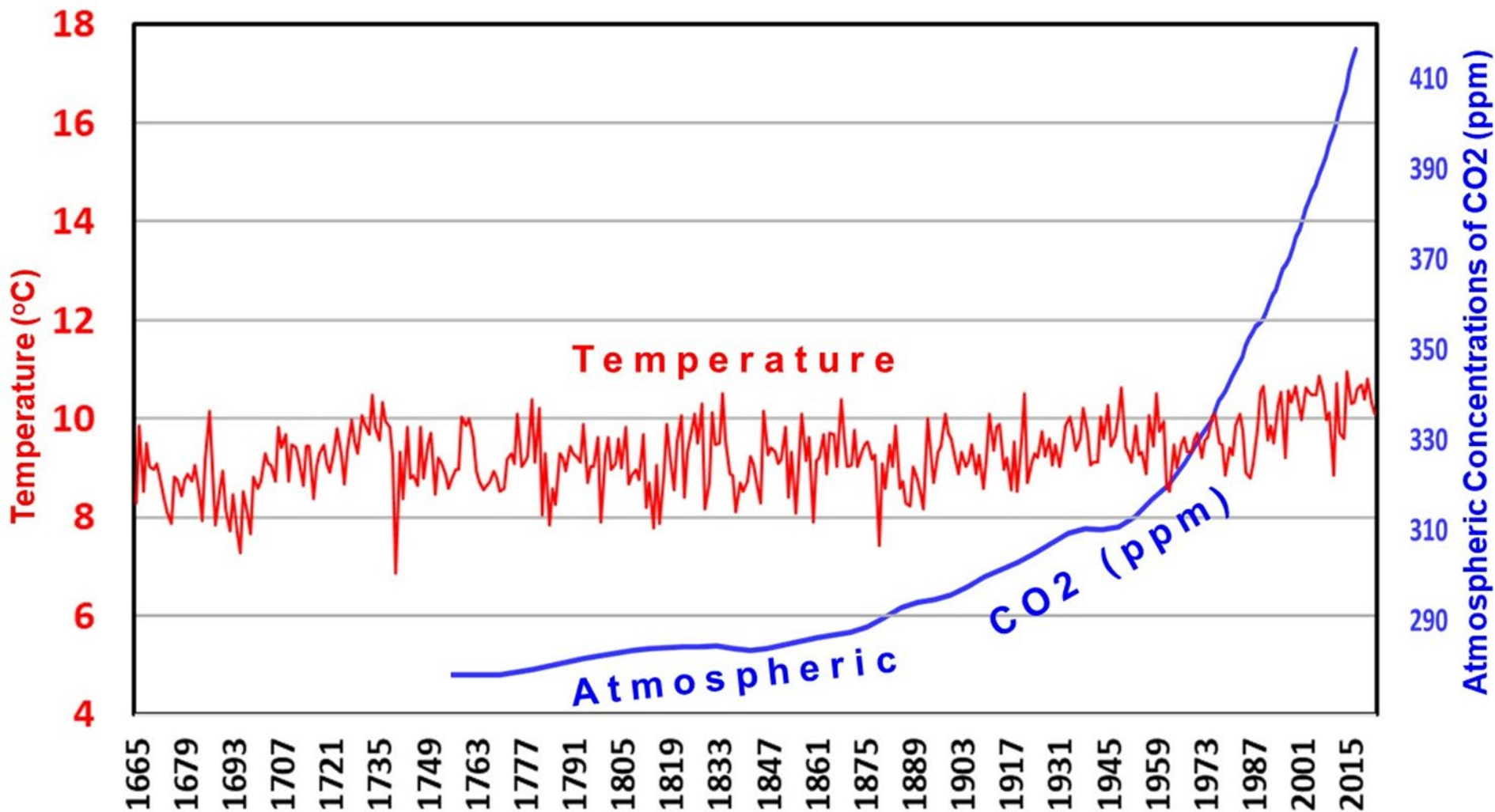
## Increasing CO<sub>2</sub> and Decreasing Temperature



# 8,000 Years CO2 vs. Temperature

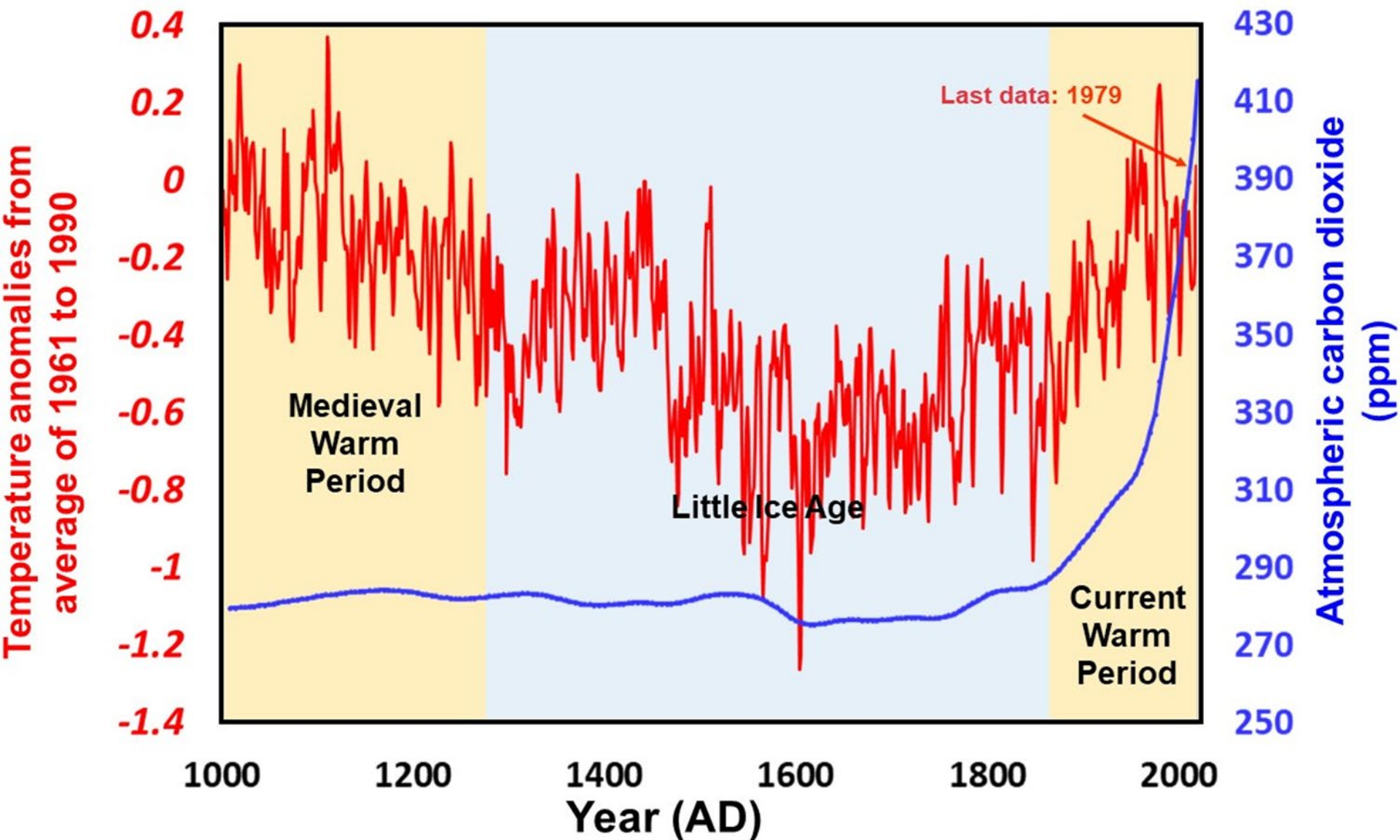


# 350 Years CO2 vs. Temperature

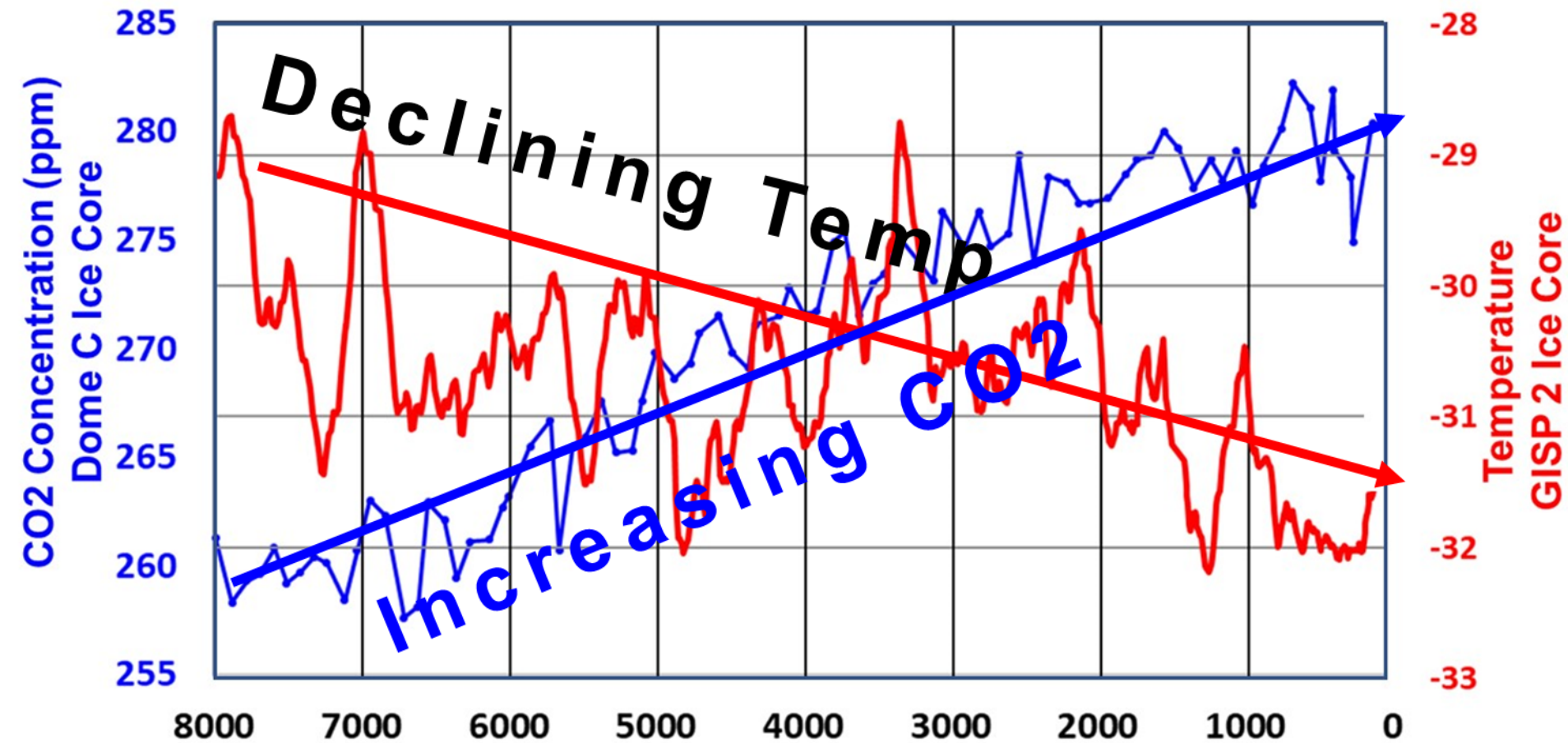




# 1,000 Years CO2 vs. Temperature

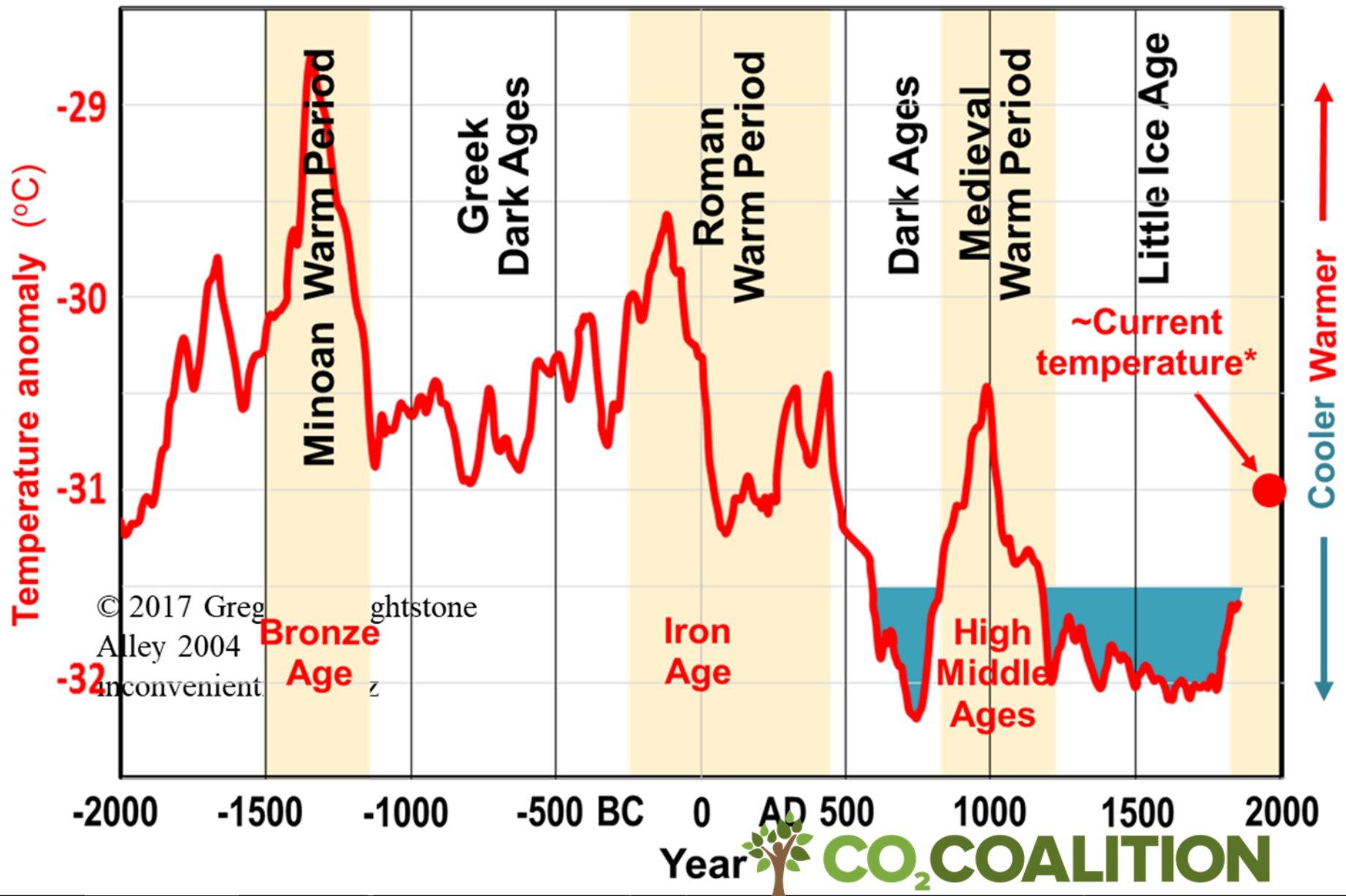


# 8,000 Years CO2 vs. Temperature



**Human history is closely linked  
to climate**

# Rise & fall of civilizations are driven by climate





**Life is Good & Getting Better**

**Climate  
Fear**

**Climate  
Fact**