

Sierra Club's Ignorance revealed in the Winter 2021 Editorial



Bob Endlich

bendlich@msn.com

Cruces Atmospheric Sciences Forum

15 Jul 2023



<https://www.sierraclub.org/sierra/2021-6-winter/editor-s-desk/new-abnormal>

The New Abnormal

Editorial by editor Jason Mark

We need to prepare for the worst even as we organize
for a better future

SIDEBAR

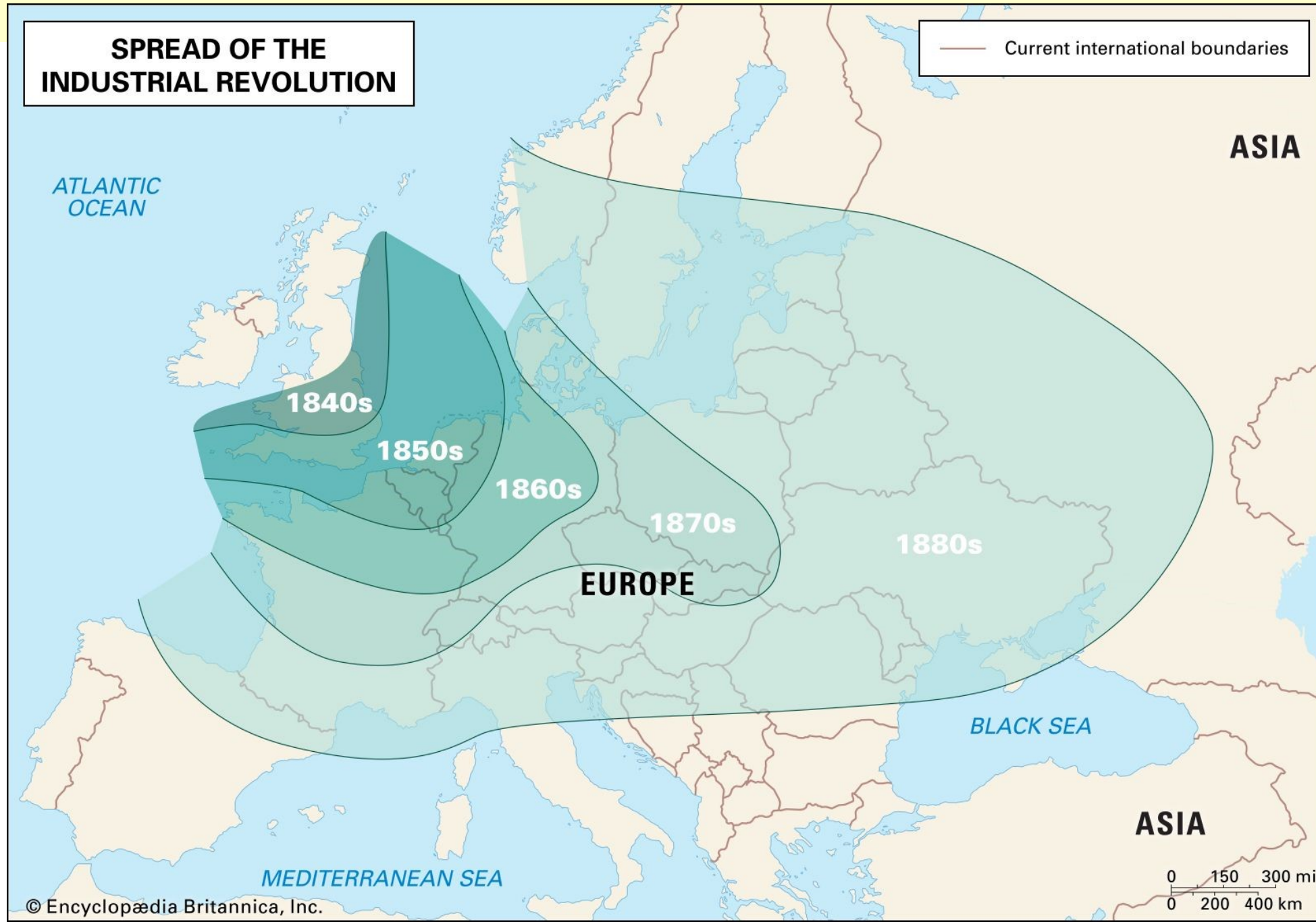
I found the Winter 2021 edition
of Sierra in a doctor's office
waiting room....



Close-up of a riverbank eroding
Photo by Nathaniel Wilder



This photo, and the editorial, imply that before humans started using fossil fuels, which took off rapidly in the Industrial Revolution (next graphic), temperatures never changed, erosion never happened, landslides never occurred, and certainly, trees growing in the dirt, never moved during landslides.



This describes the format I use here to provide reason, context, history, and even sanity as a methodology to compare Sierra Club's alarmism to my 'reasoned analysis.'

The format I use is a yellow block of text from Sierra Club, my underlining some of the most egregious statements, followed by my analyses of these.

The red number in the upper right is my numerical ordering of this analysis...

<https://www.sierraclub.org/sierra/2021-6-winter/editor-s-desk/new-abnormal>

We need to prepare for the worst even as we organize for a better future.

Twenty twenty-one was the year that the climate crisis became unavoidable. With any luck (if you can call it that), in hindsight this will be seen as the year when Americans finally, belatedly, came to understand the severity of the crisis. The evidence has been impossible to ignore: a freakish winter deep freeze that shut down much of Texas, another horrific fire season in the West, a historic heat wave in the Pacific Northwest, a spate of deadly floods in the South quickly followed by Hurricane Ida—a storm so powerful it ended up killing dozens of people in the Northeast, more than a thousand miles from where it made landfall. According to Pew Research Center, more Americans than ever before say that they are experiencing extreme weather events, and in a separate survey, nearly eight in 10 people said that such events have made them more concerned about climate change. The alarm bells are clanging.

Mark: (repeated) “Twenty twenty-one was the year that the climate crisis became unavoidable. With any luck (if you can call it that), in hindsight this will be seen as the year when Americans finally, belatedly, came to understand the severity of the crisis. **The evidence** has been impossible to ignore: **a freakish winter deep freeze** that shut down much of Texas, **a historic heat wave in the Pacific Northwest**, a spate of deadly floods in the South quickly followed by **Hurricane Ida—a storm so powerful it ended up killing dozens of people** in the Northeast, **more than a thousand miles from where it made landfall**. According to Pew Research Center, more Americans than ever before say that they are experiencing extreme weather events, and in a separate survey, nearly eight in 10 people said that such events have made them more concerned about climate change. The alarm bells are clanging.” (bolding added)

Bob’s Comment: This is NOT EVIDENCE of a “climate crisis.” This is just what weather does, and a reason why we keep weather records. Even if there was no change in mean temperature, the statistics of a temperature time series would show new record temperatures would continue to be set, all without a change in the mean, & certainly without human intervention in atmospheric dynamics.

<https://casf.me/madness-no-climate-emergency/>

It's madness, madness, madness, there is no climate emergency

Guest Author

January 29, 2023

climate emergency

arctic ice, carbon dioxide,
climate change, climate
science, nett zero carbon,
renewable energy, sea level
rise, severe storms, weather
extremes

“Although they say the science is settled! In fact, the science is never settled . . .”

Dick Reaney

Labels: [Climate Realism](#), [Dick Reaney](#), [Global warming alarmism](#)

“a freakish winter deep freeze that shut down much of Texas”

1-1

Here we go again...my italicized quote below is from

<https://casf.me/critique-of-the-june-2021-aarp-bulletin-climate-change-and-you/>

“Weather records show that snow, freezing rain and extremely cold temperatures are a once-a-decade, and even fewer years, feature of the climate of Texas and other areas not far from the center of continental North America.”

AARP says the cold weather event of February 2021 in Texas brought, “snowfalls not seen since the Truman administration,”

... but there is an article about the San Antonio snowstorm of 1985, which said it was “the worst snowstorm San Antonio had seen in 100 years,”

These are clear indications that the return of snow events, with some periods approaching 100 years or so, is a **feature of the extant climate and weather events seen in this part of the country**, not an indication of climate change.

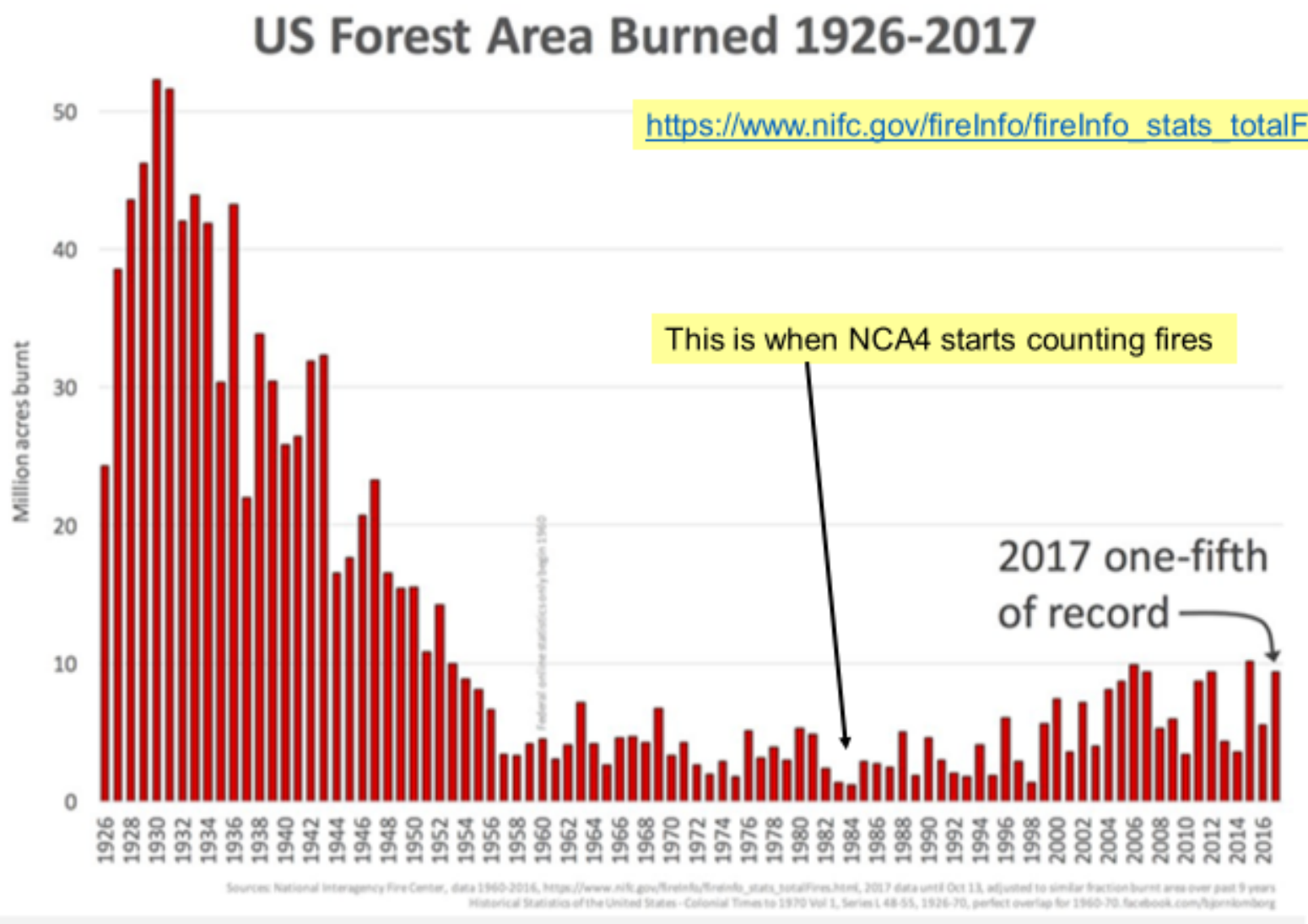
To which I add, ‘***and not an indication of human-caused, CO2-fueled global warming...***’

2022...“another horrific fire season in the West”

1-2

Balderdash! The graphic below came from <https://casf.me/new-visitors/> specifically, https://casf.me/wp-content/uploads/2022/08/Extreme-Weather-Increasing_24-Apr-2019-updated-20-Aug-2022_.pdf

Recent fire seasons were well below the peak US fires, which occurred about 1930



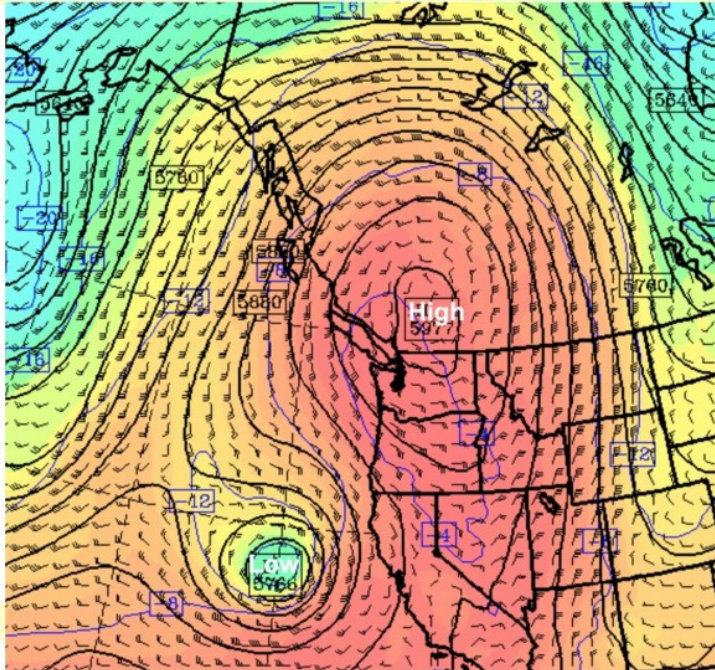
“a historic heat wave in the Pacific Northwest...”

<https://casf.me/claims-the-pacific-northwests-heat-wave-was-human-caused>

1-3

“...Cliff Mass’ blog post of 5 July 2021 analyzes the hot temperatures experienced in the Pacific Northwest in late June 2021. His analysis is that only a maximum of 1-2F of the 30F to 40F temperature excursions during this weather event might have been caused by atmospheric CO2 increases.”

<https://cliffmass.blogspot.com/2021/07/was-global-warming-cause-of-great.html>



Pacific Northwest Chart
Maximum Intensity
of the heat wave.

1800Z Sunday, June 27th, 2021, 500 Mb

Rather than a climate catastrophe, careful analysis, especially of the upper air charts, reveals that this was a **rare weather event** caused by an unusual weather development in the upper air patterns, an **Omega Block**, an event remarkably similar to the 2019 Omega Block in Europe <https://casf.me/the-2019-heat-wave-in-europe-and-beyond/> which led to hot temperatures in Continental Europe and the UK.

Rare Weather events happen! Omega Blocks happen. It was a **weather event** that set a new high temperature record for Washington State; a new high temperature record was NOT set in nearby Oregon.

Sierra's Mark: "Hurricane Ida—a storm so powerful it ended up **killing dozens of people in the Northeast, more than a thousand miles from where it made landfall.**" (bold added)

1-4-1

Compare 2022's Hurricane Ida (above) to 1954's Hurricane Hazel

<https://www.weather.gov/mhx/Oct151954EventReview>

Hurricane Hazel, October 15, 1954

[Weather.gov](#) > [Newport/Morehead City, NC](#) > Hurricane Hazel, October 15, 1954

Newport/Morehead City, NC
Weather Forecast Office

"Hurricane Hazel was the deadliest and costliest hurricane of the 1954 hurricane season and is the strongest and only Category 4 hurricane to ever hit the North Carolina coast. The first indication that a tropical cyclone had formed came on October 5, 1954, about 50 miles east of the island of Grenada in the Windward Islands.

"Hazel moved westward over the Caribbean Sea through October 8 before sharply turning northward under the influence of an upper-level low that was situated over the western Caribbean Sea. By October 9, Hazel had intensified into a powerful Category 4 storm with maximum winds of 135 mph. Between October 9th and 12th Hurricane Hazel moved northward and then north-northeastward crossing western Haiti on **October 11 leaving a death toll estimated to be between 400 and 1,000**"...(bold added)

"Hazel gradually turned back northward passing over the southeastern Bahamas on October 13, then turned more northwestward on the 14th when hurricane hunter planes found Hazel's maximum winds had increased to 150 mph with the center now moving at a rapid 30 mph in response to a strong upper-level trough moving eastward over the Mississippi Valley."

“Hurricane Ida—a storm so powerful it ended up killing dozens of people in the Northeast, more than a thousand miles from where it made landfall. “

Compare 2022's Hurricane Ida to 1954's Hurricane Hazel

1-4-2

<https://www.weather.gov/mhx/Oct151954EventReview>

Hurricane Hazel, October 15, 1954

[Weather.gov](#) > [Newport/Morehead City, NC](#) > Hurricane Hazel, October 15, 1954

Newport/Morehead City, NC
Weather Forecast Office

“Landfall occurred on the North Carolina/South Carolina border on the morning of October 15th as the system was starting to transition into an extra-tropical storm. The coastal area near the landfall was battered by winds estimated to have been as high 150 mph. Winds of 98 mph were measured in Wilmington while winds were estimated at 125 mph at Wrightsville Beach and 140 mph at Oak Island. A storm surge of over 12 feet inundated a large area of coastline reaching as high as 18 feet at Calabash, where the storm surge coincided with the time of the lunar high tide and Hazel nearly wiped out Garden City, SC.

“As Hazel moved rapidly inland, its winds only slowly diminished with a gust to 110 mph reported at Fayetteville and 90 mph at the Raleigh-Durham Airport. Wind gusts near 100 mph were reported from numerous locations in Virginia, Maryland, Pennsylvania, Delaware, New Jersey, and New York as Hazel raced northward. Myrtle Beach, SC reported a peak gust of 106 mph; Washington DC reported sustained winds to 78 mph while peak gusts to over 90 mph were reported far to the north in New York state. In New York City, a peak gust of 113 mph was recorded at the Battery at the south end of Manhattan.”

2022's "Hurricane Ida—a storm so powerful it ended up killing dozens of people in the Northeast, more than a thousand miles from where it made landfall."

1954's Hurricane Hazel struck Haiti, then proceeded to the Carolinas and on to New York and Ontario...

"The shortest distance (air line) between Haiti and New York is **1,503.26 mi.**" (Internet Search result)

And so...

we are supposed to think that 2022's Hurricane Ida was extraordinarily "powerful" just because Sierra Club's Jason Mark says that Ida's killing of dozens in 2022, some 1000 miles away from first landfall is much more important than Hazel's death toll of 400 to 1000 individuals, some 1500 miles distant from Hazel's landfall in Haiti?

Methinks Jason Mark is lacking in the academic skills of literature search and critical thought.

“According to Pew Research Center, more Americans than ever before say that they are experiencing extreme weather events, and in a separate survey, nearly eight in 10 people said that such events have made them more concerned about climate change. “

1-5

The quote above seems to be high-school yearbook quality, perhaps popularity-contest material.

Climate has always changed; there are no times showing temperatures “flat-lining.”

Extreme Weather is NOT increasing in intensity, despite what... “Americans...say”

Facts from: <https://casf.me/critique-fourth-national-climate-assessment/>

Strong to violent tornadoes are DECREASING.

Global Hurricane frequency is DECREASING.

Global Hurricane and Tropical Storm Accumulated Cyclone Energy is DECREASING since 1994.

Number of Category 3 and stronger landfalling hurricanes is DECREASING.

FACTS matter, not what “Americans (taught WHAT to think, not HOW to think) say”.

Mark: “When people try to make sense of these now-common “unprecedented” events, they often describe them as the “new normal.” But that’s a misunderstanding of our predicament. We’re not going to reach any kind of new normal—unless, that is, we understand the new normal to be a state of constant unpredictability.”

“Rising temperatures aren’t leading to reliable shifts, like winter slipping into spring and spring folding into summer. The global climate is a finely tuned system, and even small changes in temperature can—as we’re witnessing—have unexpected consequences. Climate change is, above all, chaotic, unpredictable, and disorienting.”

“ Which means we are all going to have to find a way to wrap our minds around the idea of discontinuity. Author Alex Steffen has written that discontinuity is the signature characteristic of the climate epoch. We have created a new era in which “past experience loses its value as a guide to decision-making about the future,” Steffen writes. The world “has become something no human has ever experienced before.” We find ourselves in the midst of global environmental changes that are happening more quickly than we are collectively able to understand them.”

“The global climate is a finely tuned system”

Sierra Club’s Jason Mark:

2-1

“I have a degree in international relations from Georgetown University and a certificate in ecological horticulture from the Center for Agroecology and Sustainable Food Systems at UC-Santa Cruz.”

I question Jason Mark’s reasoning abilities.

Earth’s weather and climate are dominated by the diurnal and annual cycles.

But to claim that Earth’s climate is a “finely tuned system” is sophistry.

sophistry:

noun

the use of fallacious arguments, especially with the intention of deceiving.

The ability to forecast in even gross terms such climate elements as the number, intensity, and locations of tropical storms and hurricanes even a few weeks in advance, let alone for an entire season is well beyond the state of the art.

Sierra Club's Mark:

“The cascading consequences of climate change may be difficult to grok, <understand> but the causes are not. **We know precisely what we need to do: Stop burning coal, oil, and gas as fast as possible.** At this point—having lost 30 years to fossil fuel industry deception, disinformation, and profit-driven delay—preventing climate change in the short term is no longer an option. And still, every hydrocarbon left unburned and every forest left standing avert some measure of future harm and instability.

This, then, is the great challenge of climate discontinuity: to continue to act even in the midst of uncertainty and upheaval. With Earth systems unraveling at a frightening pace, the tasks before us are clear. We need to prepare and adapt for the worst, even as we continue to educate, agitate, and organize for the best future possible.”

(bold added)

Jason Mark couldn't be more WRONG, as the following Earth Irradiance Data show.

Non-Adjusted Temperature Data Appear To Correlate With 20th Century Solar Forcing

[Yndestad and Solheim \(2017\)](#) have released a reconstruction of solar activity (Total Solar Irradiance, or TSI) for 1700-2013. (coloring enhanced for presentation here)

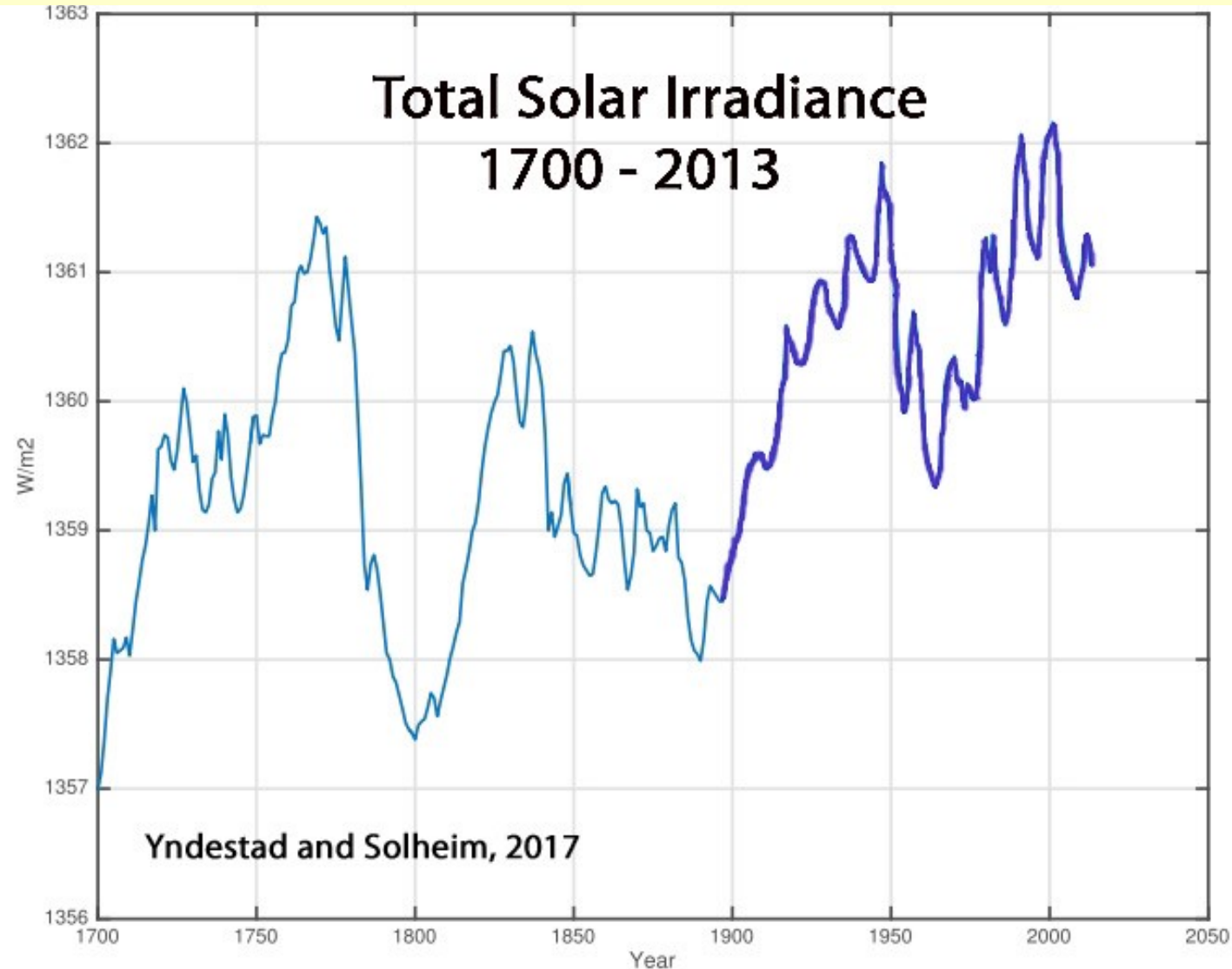
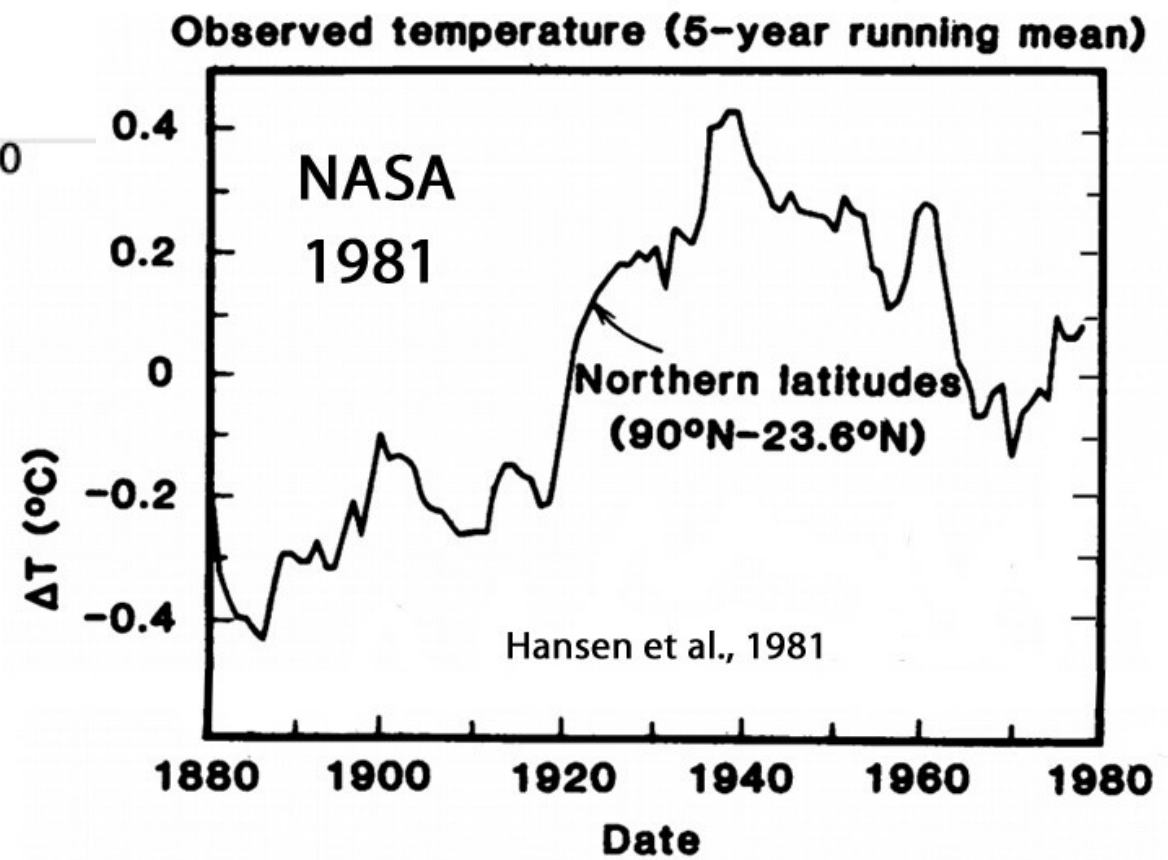
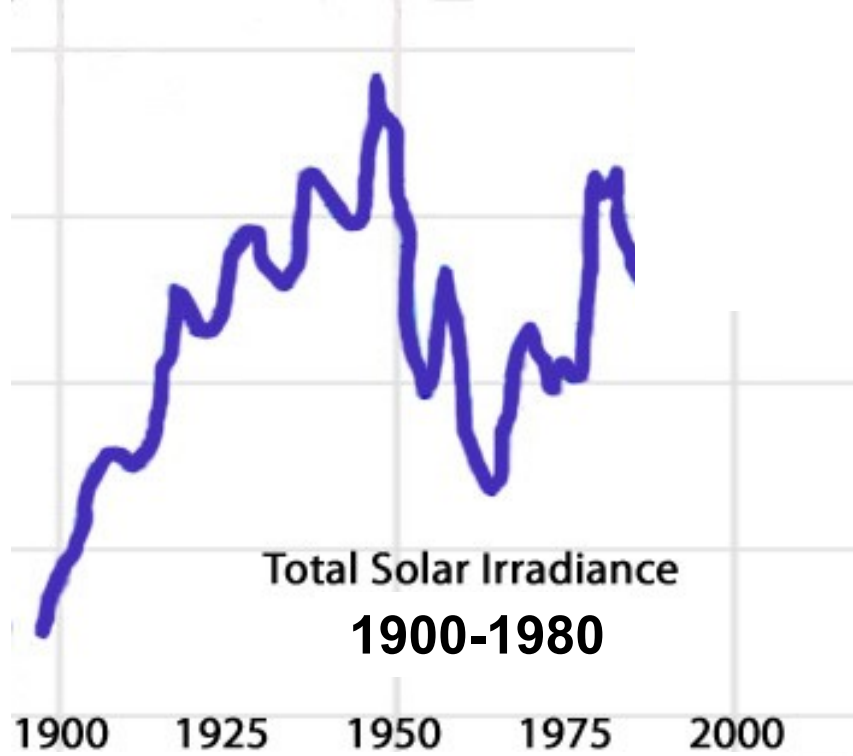


Fig. 3. TSI-HS total solar irradiance from 1700 to 2013 A.D. ([Scafetta and Willson, 2014](#)).



Sierra Club's Mark: (repeated)

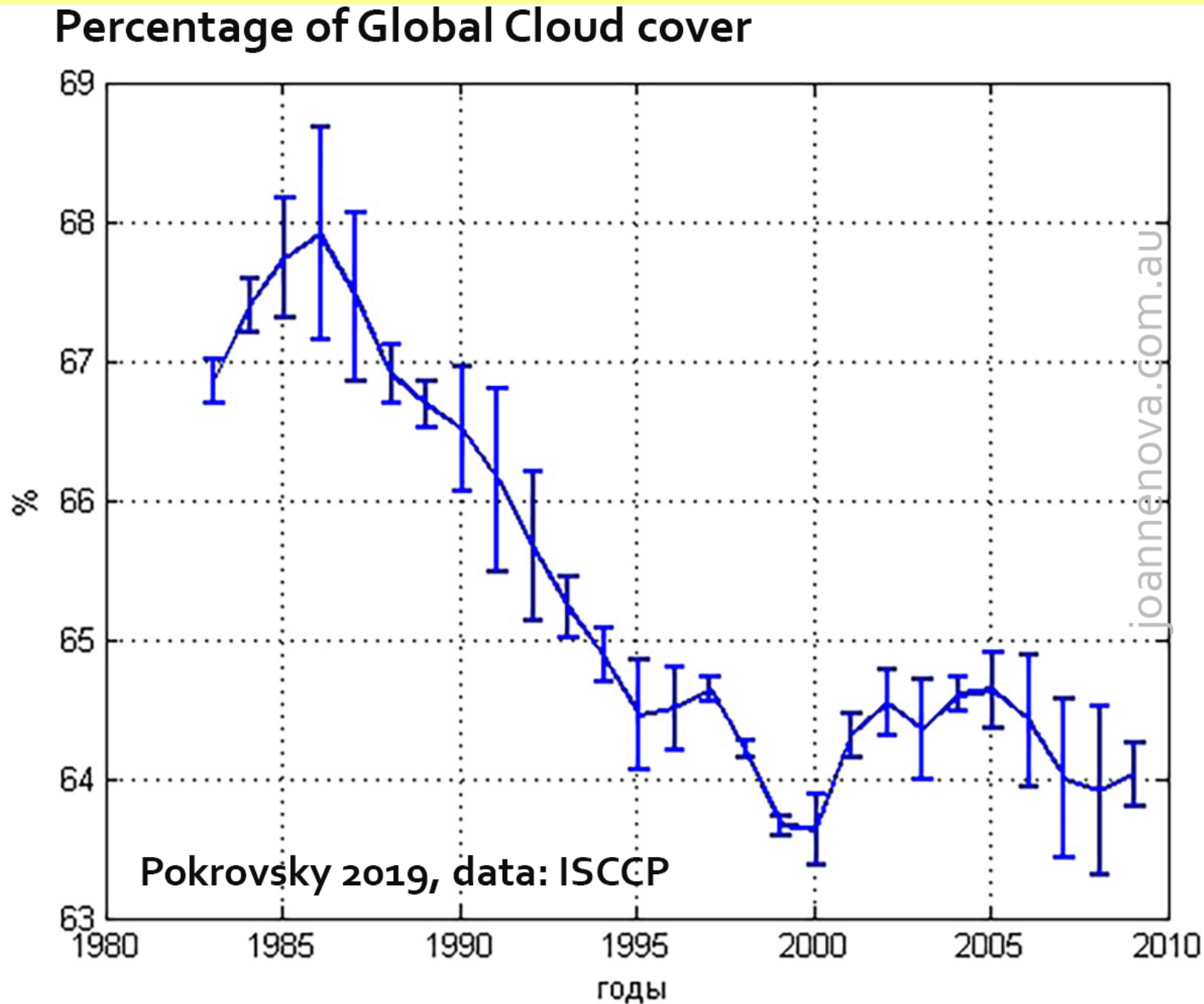
“The cascading consequences of climate change may be difficult to grok, <understand> but the causes are not. We know precisely what we need to do: Stop burning coal, oil, and gas as fast as possible. At this point—having lost 30 years to fossil fuel industry deception, disinformation, and profit-driven delay—preventing climate change in the short term is no longer an option. And still, every hydrocarbon left unburned and every forest left standing avert some measure of future harm and instability.

The notion that changes in climate are caused by burning of fossil fuels and that stopping our use of fossil fuels will “prevent climate change “ is daft, as daft as the popular notion of “climate legislation,” the notion we can change earth's climate through legislation.

Jason Mark is SO SURE that humans can “prevent climate change”... and that increasing temperatures are caused by more CO2.

But he is SO WRONG...

Cloud cover decreases....



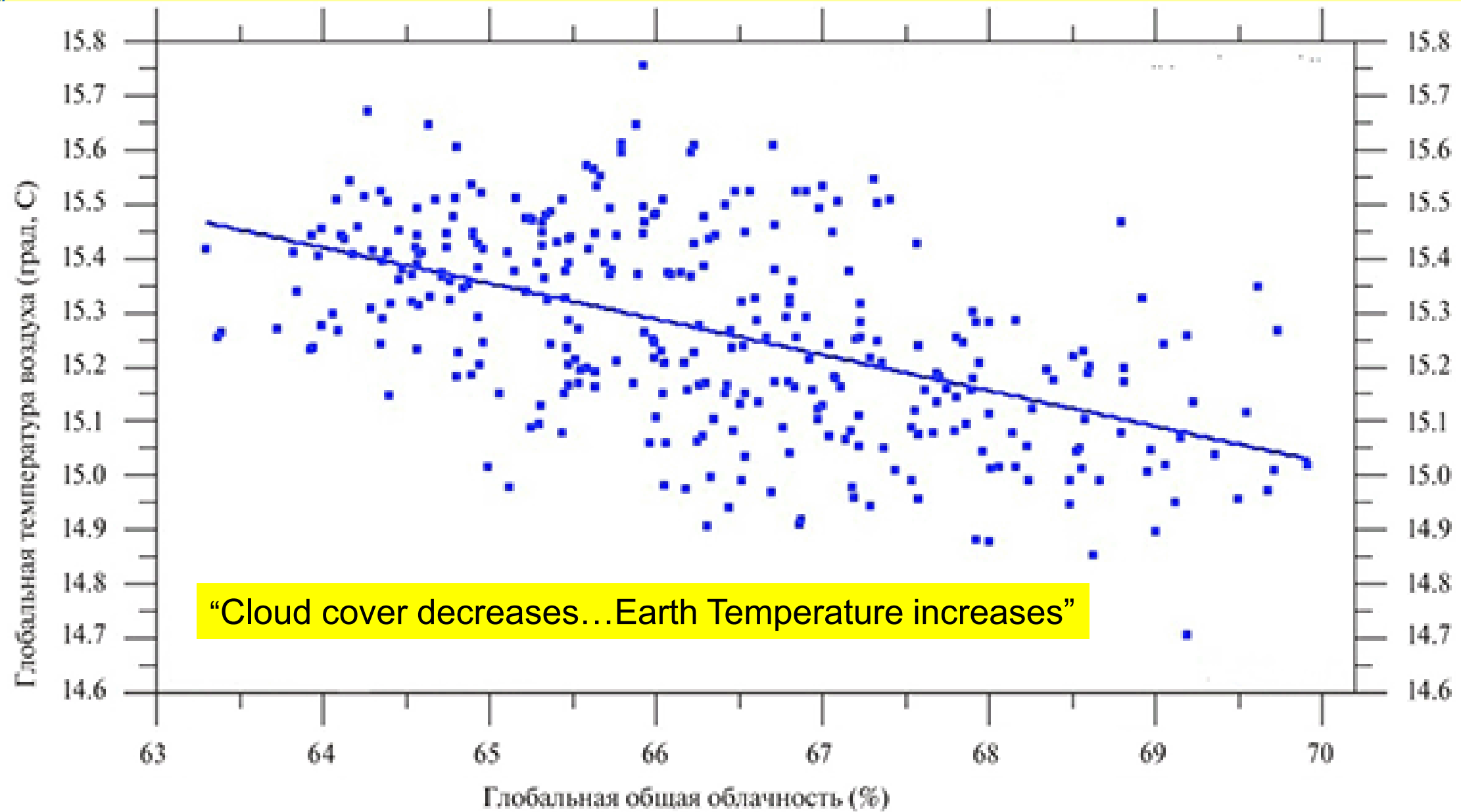


Fig. 9. Results of regression analysis of the series of global clouds (ISCCP) and surface air temperature (CRUTEM3).

COMMENT 1: The GISP2 Ice Core data from Greenland show that the present warming is but one of the many irregular and weak warming episodes as we **cool from the peak temperatures** of the current interglacial, the Holocene, **about 8,000 years ago**.

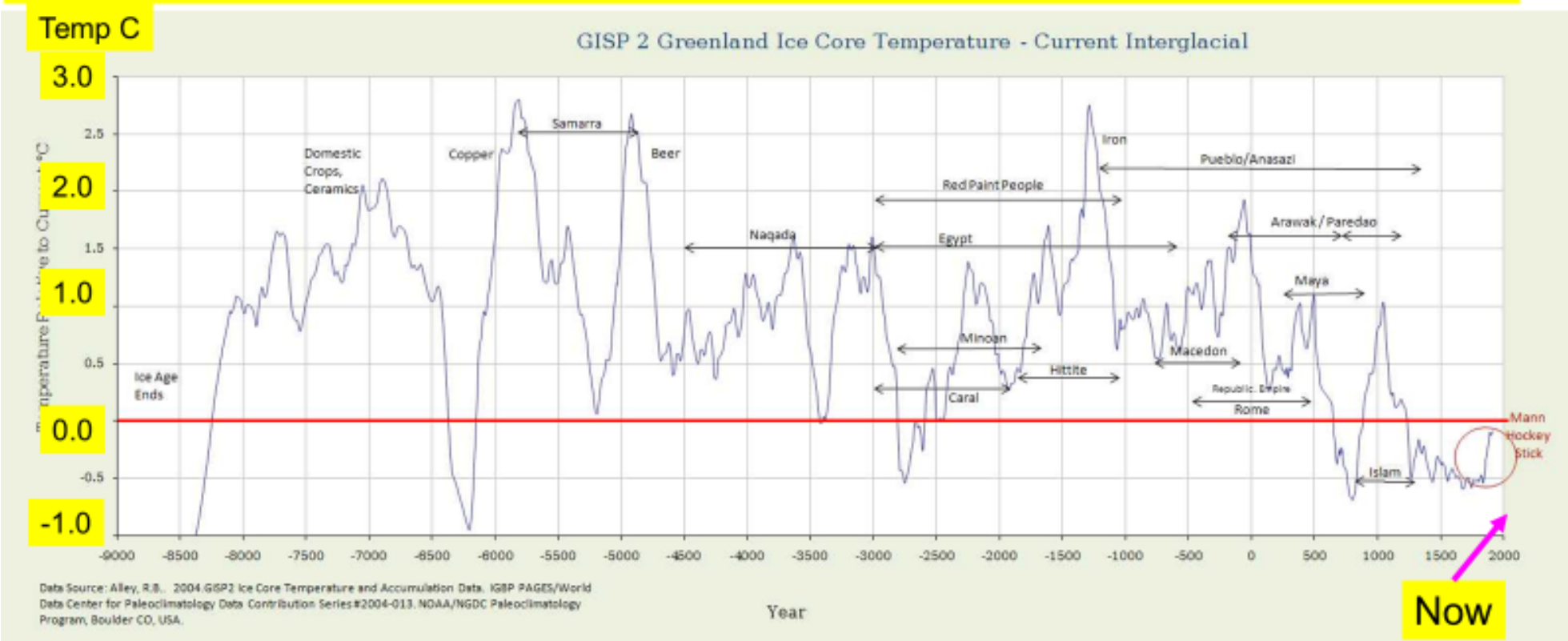
Graphic below is from Fig 5 of <https://casf.me/continuation-of-present-warming-not-an-existential-threat/>.

Most of the past 10,000 years were considerably warmer than at present.

Sierra Club's Mark is incredibly ignorant in his editorial.

<https://wattsupwiththat.files.wordpress.com/2011/07/alley-2004.jpg>

Times in the recent past, temperature trace above the red line, show times in the past that were hotter than today.



The notion we can make the wiggles in the temperature curve flat-line through "climate legislation" is daft.

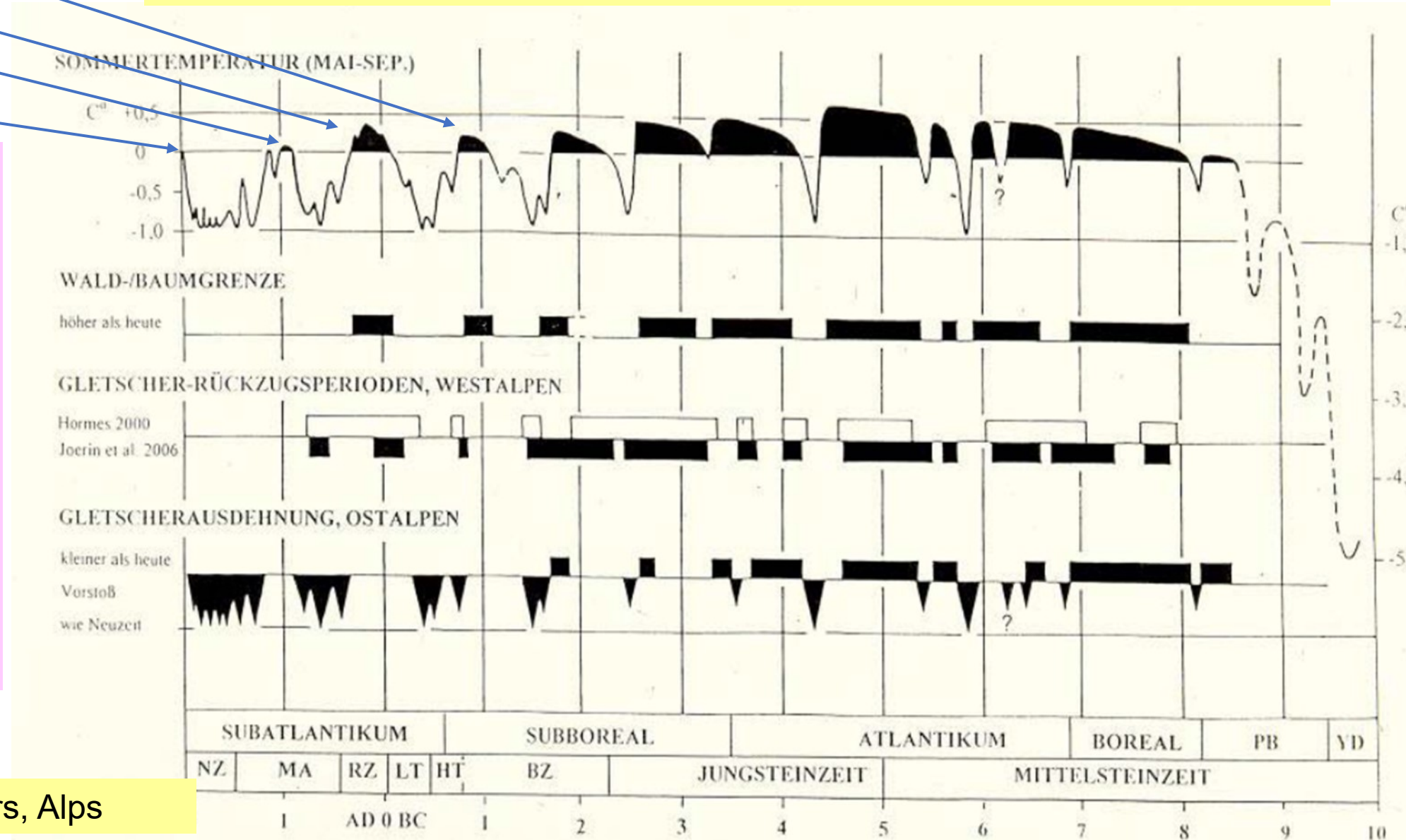
If you understand this chart, you will see the ignorance of the climate Alarmists' cries of "Existential Threat"

These are tree-ring-derived “proxy” temperatures from the Alps.

Minoan
Roman
Medieval
Present

http://www.iuf-berlin.org/wm_files/wm_pdf/prof._patzelt_berlin_4.12.2009.pdf

Top line of the graph below is the May to September temperature time series



Top line shows ~thirteen separate warm periods since the last glacial maximum.

Present Warm period (...with more CO2..) appears weaker than almost all previous Holocene Warm Periods

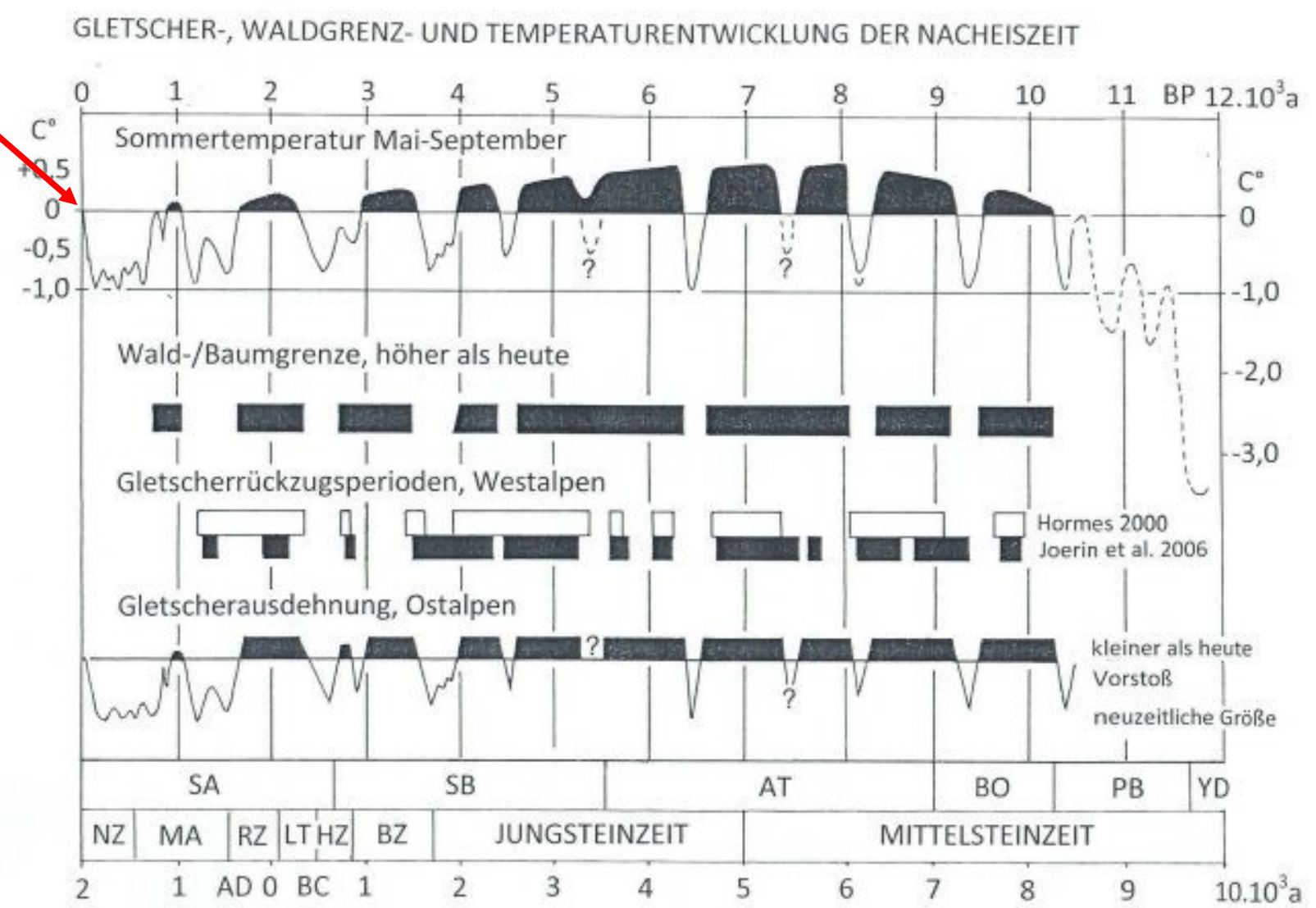
Timeline, last 12,000 years, Alps

COMMENT 2. Analysis of ancient trees found in lateral moraines in the Austrian Alps by Prof G. Patzelt shows peak summer temperatures occurred about 8,000 years ago.

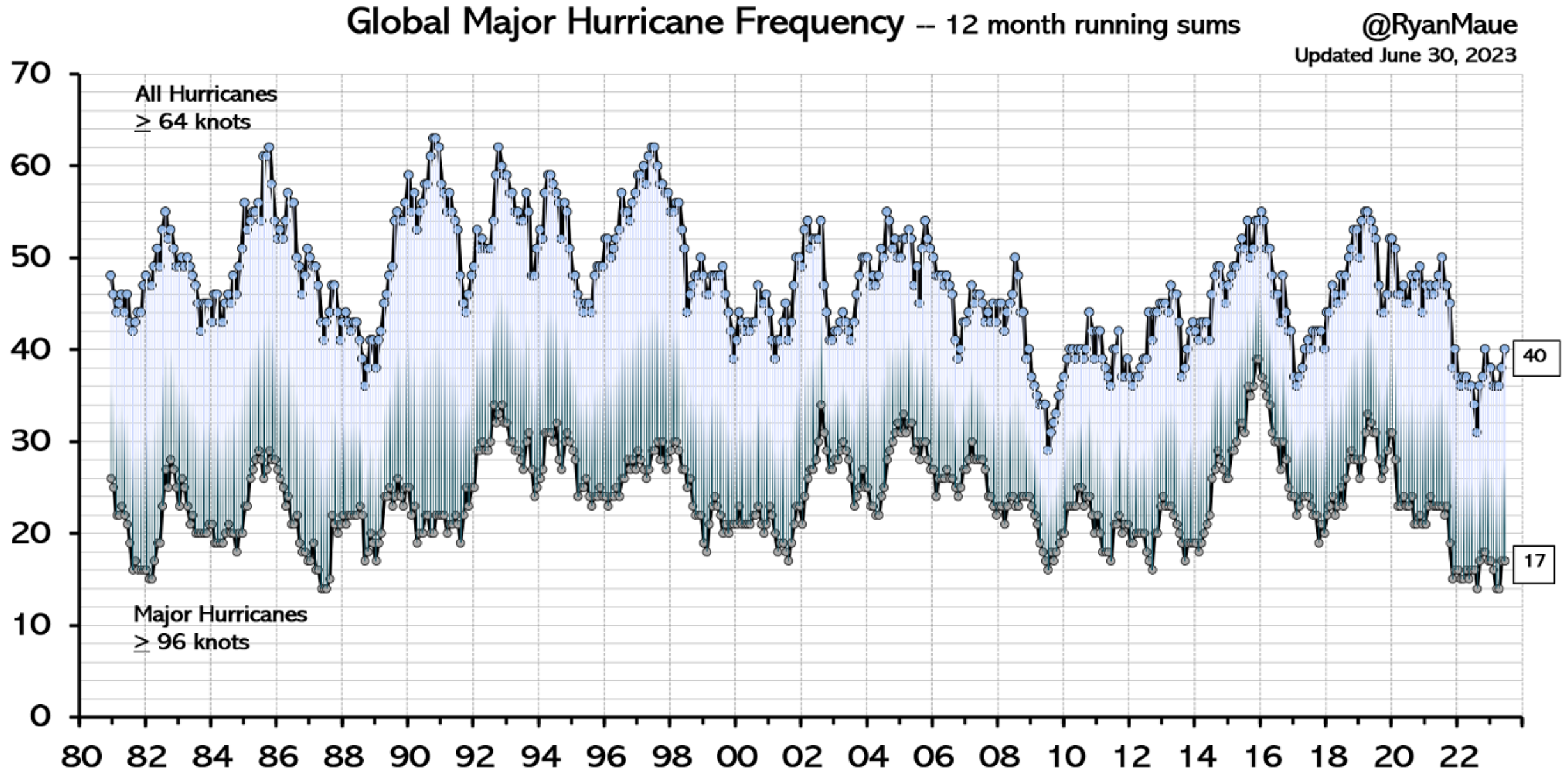
We are NOT headed into Climate Armageddon from the heat.

Now

<https://notrickszone.com/2020/01/25/world-leading-alps-glaciologist-shows-todays-climate-vegetation-and-glacier-situation-nothing-special/>

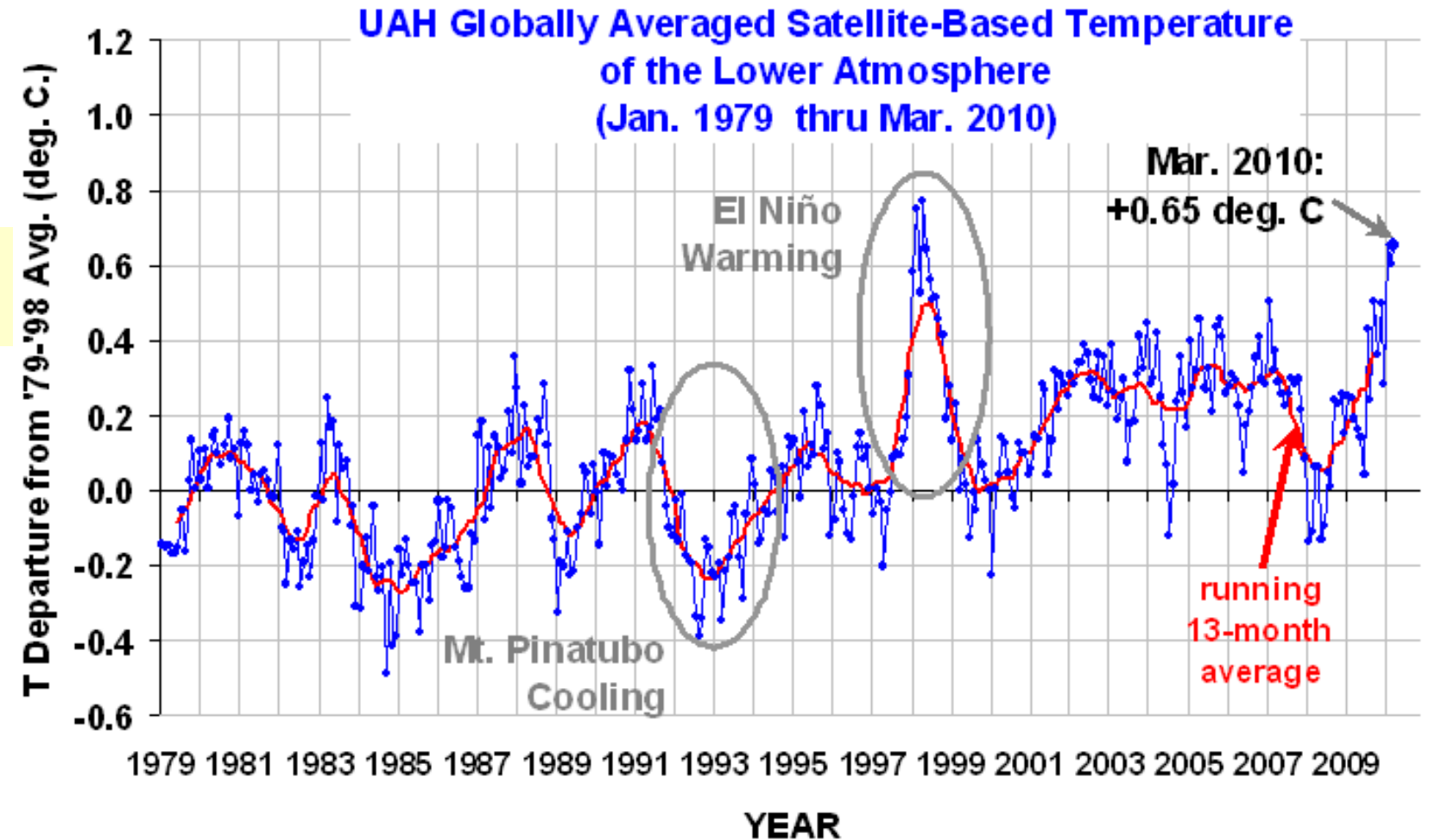


It is difficult to take Mark's writings about 'more powerful hurricanes' and 'alarm bells sounding' seriously, when Ryan Maue's data show quite the opposite happening in the real world, where we all live.

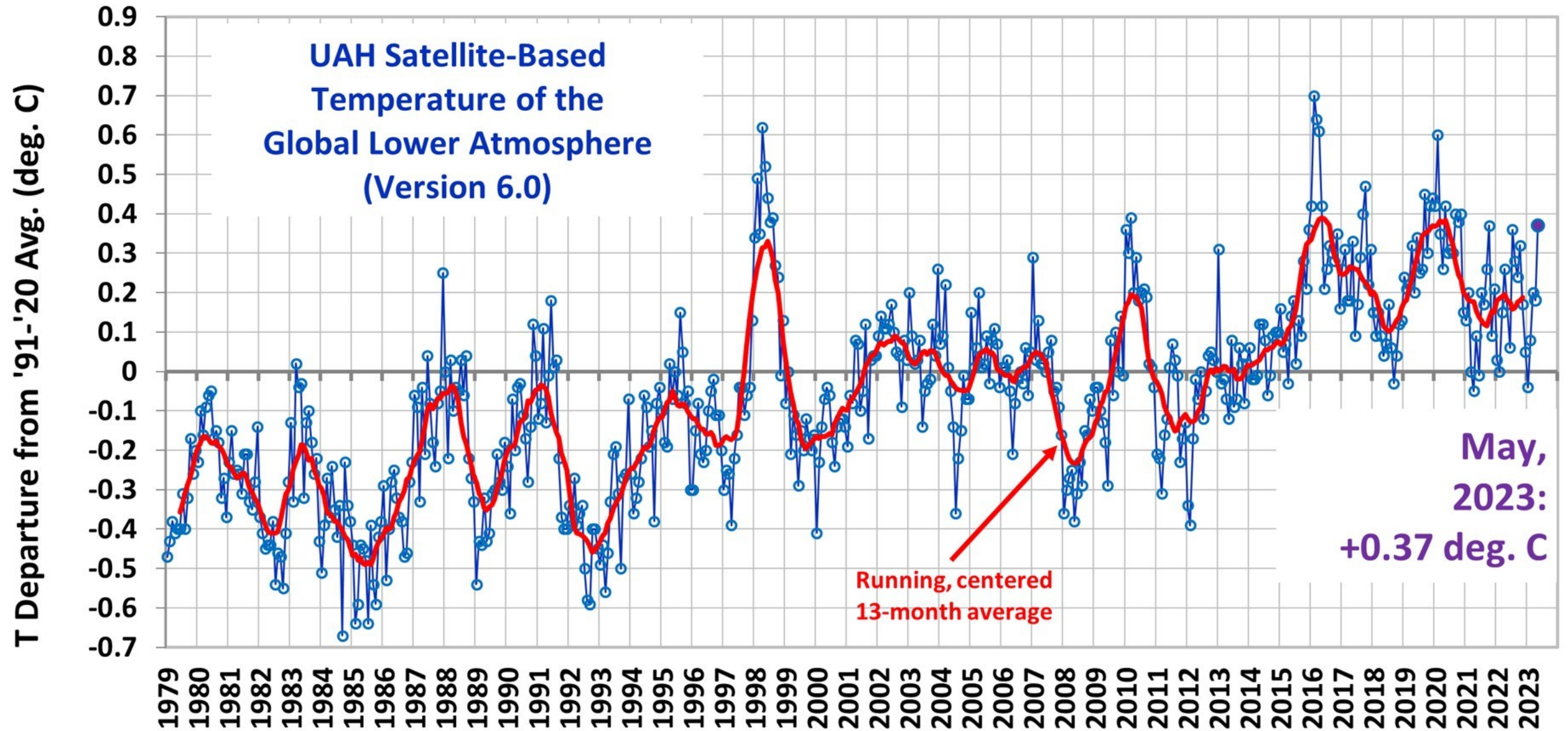


“The global climate is a finely tuned system.” More Balderdash!
1991’s Mt Pinatubo Cooling event and the 1997 El Nino Warming shown in the Temperatures the Lower Troposphere from UAH show negative and positive temperature excursions in the global temperature time series.
Rather than a precariously balanced “finely tuned system,” **earth’s atmospheric temperatures are resilient to the temperature excursions forced by volcanism, and other temperature changes, such as imposed by the ENSO system as explained in <https://casf.me/el-nino-and-la-nina-controls-rainfall-and-drought-in-western-usa/>**

<https://www.drroyspencer.com/page/101/>



A more complete global temperature time series from UAH



“We're not going to reach any kind of new normal—unless, that is, we understand the new normal to be a state of constant unpredictability.”

Sierra Club's Jason Mark's self-puffery:

2-1

“I have a degree in international relations from Georgetown University and a certificate in ecological horticulture from the Center for Agroecology and Sustainable Food Systems at UC-Santa Cruz.”

After looking up the International Relations Department coursework requirements at Georgetown, there is nothing in Jason Mark's academic background that would qualify him to know anything about the predictability of future states of the atmosphere.

No coursework requirements in mathematics, calculus, meteorology, chemistry, physics, thermodynamics, computer science, statistics, fluid dynamics...or even Climate History.

IMHO, *This is a statement by a Liberal Arts Know-It-All, not someone who knows of what he writes.*

While computer-based weather predictions have improved remarkably over the past 60 years, **the fundamental issue in weather prediction is that there are no solutions to the nonlinear partial differential equations which form the basis for prediction of atmospheric motions.** So, of course, weather and climate are fundamentally unpredictable, but many short-term forecasts are have become remarkably successful.

“We're not going to reach any kind of new normal—unless, that is, we understand the new normal to be a state of constant unpredictability.”

2-1-2

Simply, Jason Mark's statement is ludicrous.

I add a personal observation...

Shortly after my NJ 8th grade graduation, in late August 1954, Hurricane Carol was moving off Cape Hatteras, and within a few hours strengthened significantly and accelerated rapidly to brush New Jersey, then slammed into Long Island, Connecticut, Rhode Island, and Massachusetts.

Hurricane Carol's arrival was a surprise to the locals, the adults in and around New York and New Jersey at the time.

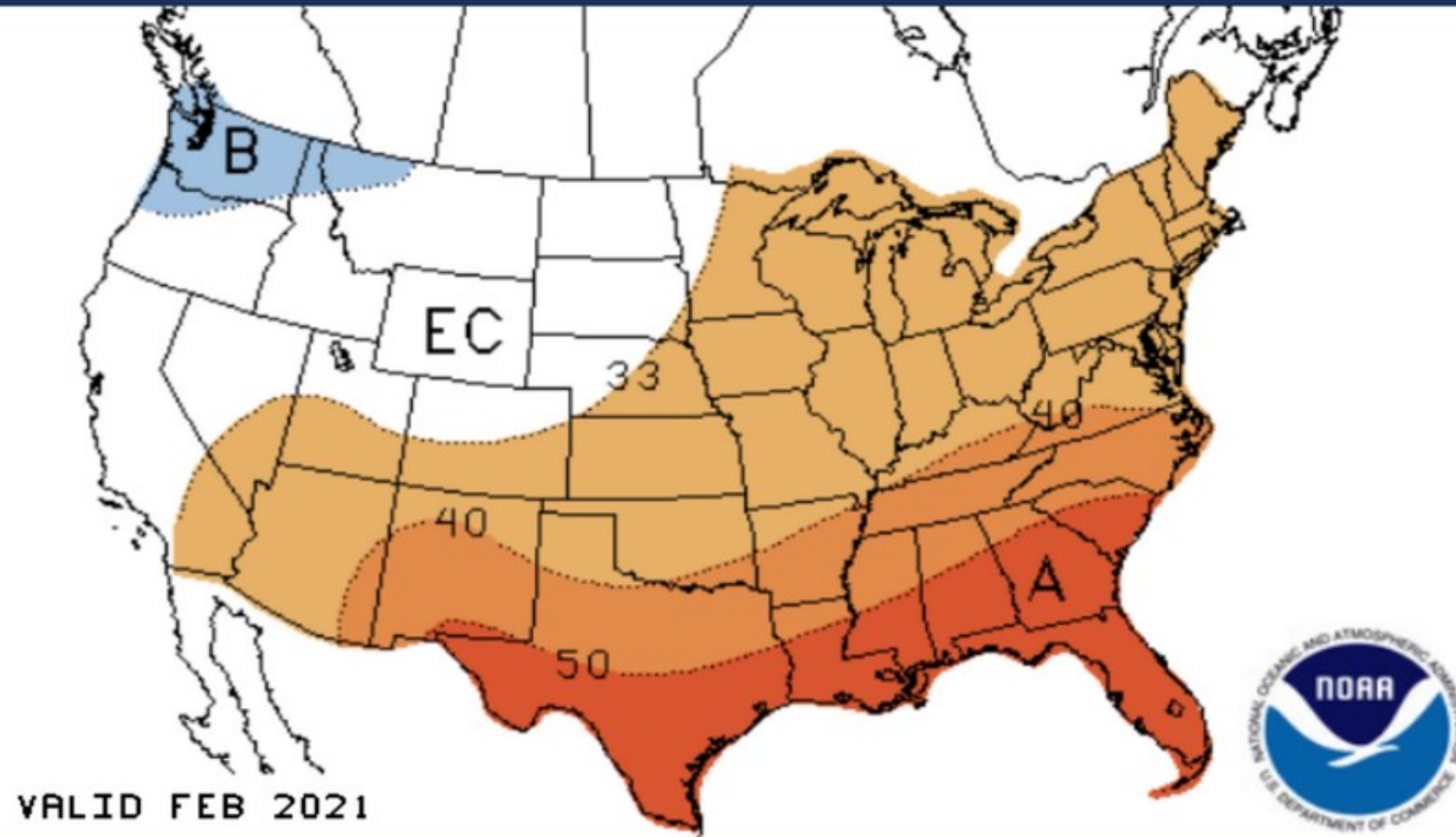
Hurricane predictability was a problem in 1954 and is still a problem.

Sixty-eight years later, in 2022, Hurricane Ian's actual movement was into southwest Florida, while model projections were for Ian to hit much further north on the west coast of Florida.

Worse, the notion of reliable climate prediction as a science is laughable, IF YOU LOOK AT THE DATA.

Texas Example follows

February Outlook – Another Warm Month Ahead



FORECAST

25 JAN 2021, 1:30 AM

[Home](#) / [News & Features](#)

U.S. had its coldest February in more than 30 years

Record-breaking deep freeze engulfed much of Texas

[Climate](#) [Satellites](#) | [climate reports](#) [climate analyses and statistics](#)

SHARE



UPDATED: March 9, 2021. *U.S. Significant Climate Events map has been updated with correct date of Brunswick, Colorado, tornado (February 15).*

March 8, 2021 —



Mark: The world "has become something no human has ever experienced before."

"Climate change is, above all, chaotic, unpredictable."

Bob: More sophistry.

We pointed out earlier, that, rather than Earth's heading into some sort of Climate Armageddon, most of the past 10,000 years were warmer than at present.... and we are irregularly cooling from the peak temperatures of ~8,000 years ago.

Also, while there are climate cycles of various periodicities, the exact sequence of these is not repeatable and not being repeated.

If it were perfectly repeatable, weather and climate prediction would be trivial.

Instead, weather and climate prediction are, after several days, essentially unpredictable, because the equations of motion of the atmosphere contain those pesky nonlinear terms which, as of now, no one knows how to solve.

Mark:

See, for example, Alaska, which is warming much faster than other areas of the country and where the very earth itself is coming undone as millennia-old permafrost starts to thaw. As Adam Federman reports in "The Big Thaw," the thawing permafrost is a slow-moving disaster, "one that to the human eye seems to be unfolding along a normal timescale but in geological terms is moving alarmingly fast." We can also see discontinuity at work in the middle of North America, where the line dividing the arid West from the humid East has moved some 100 miles eastward.

In "The 100th Meridian Is on the Loose," Carson Vaughan writes that "the anomalies are becoming less anomalous as climate change rattles the system. The variables more variable. The extremes more extreme and more frequent too."

Climate Alarmists regularly use this photo to claim that human-caused CO2-fueled global warming is causing houses in Alaska to fall into the sea after “permafrost” melts.



Here's the New York Times

<https://www.nytimes.com/2016/08/20/us/shishmaref-alaska-elocate-vote-climate-change.html>



Here's Katharine Hayhoe, in "Earthkeeping: A Climate for Change"

https://youtu.be/0HbbE74MrUc?list=PLZlaemZC4oceZ4MUIG5Aa_v0llzoiTTch At 4:46 "we see sinking villages in Alaska...Up in the Arctic we see what used to be permanently frozen ground, with houses tumbling into the sea..."

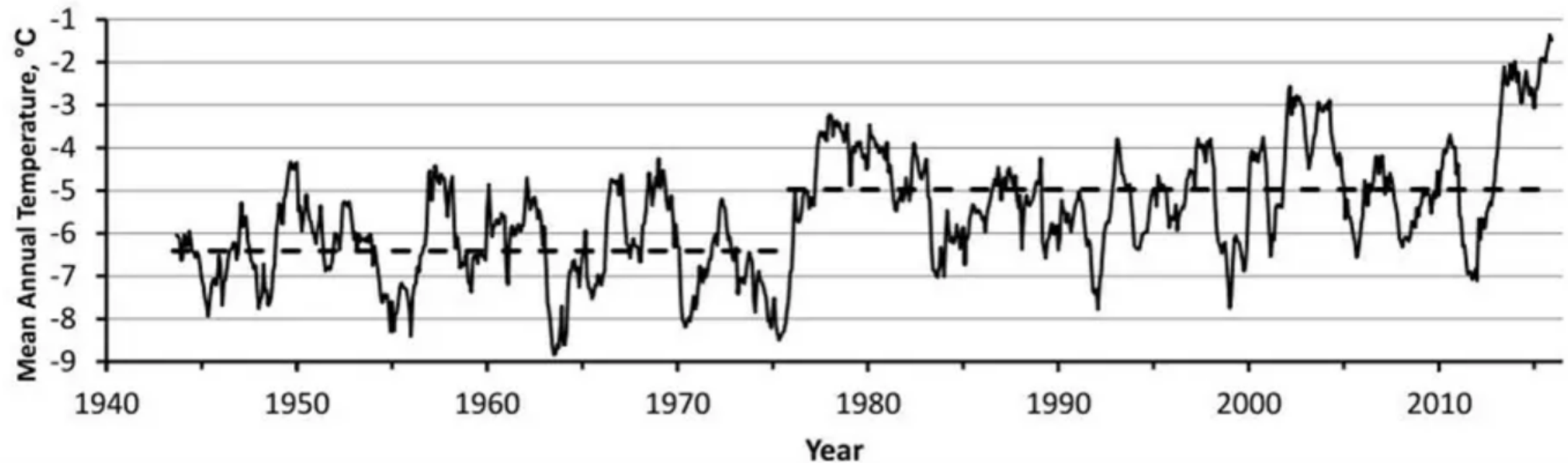


This manufactured home was placed on the barrier island at Shishmaref, Alaska

Sierra Club's Jason Mark is just wrong. The warming in Alaska is a result of the PDO, the Pacific Decadal Oscillation, not Human-caused, CO2-Fueled Global Warming, as the National Park Service says below:

<https://www.nps.gov/subjects/aknatureandscience/climate.htm>

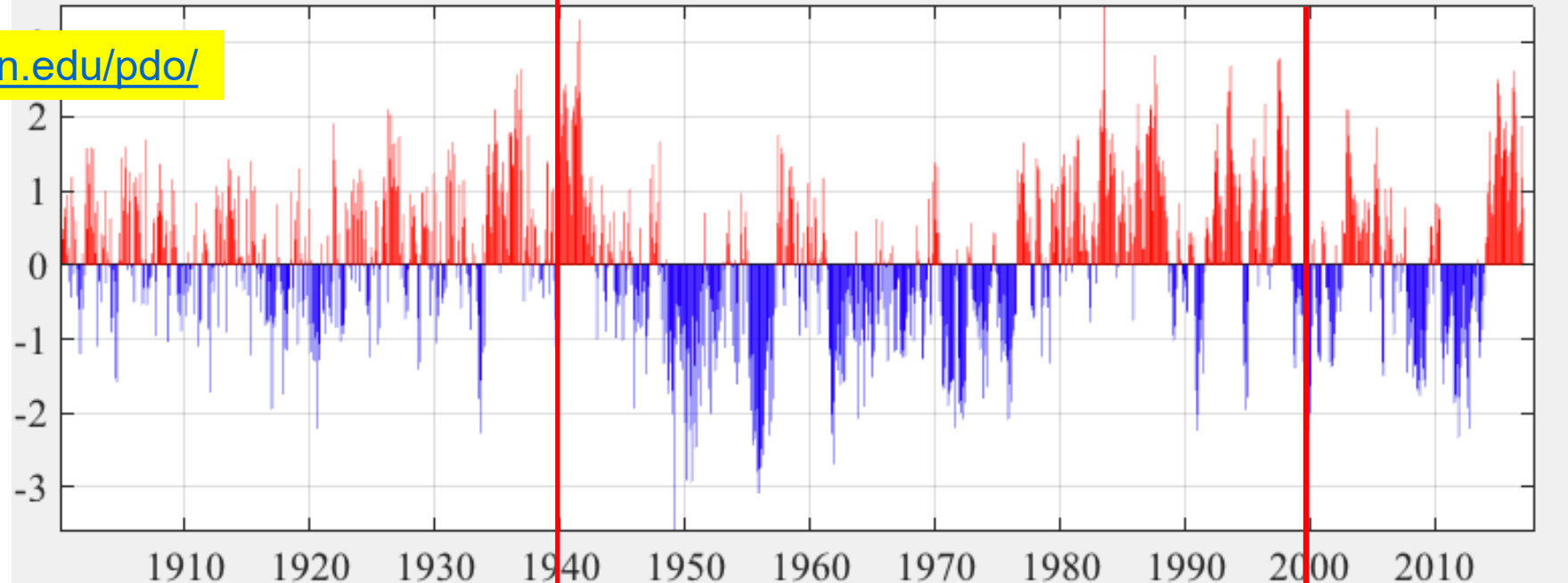
Even with multiple lines of evidence that Alaska is warming, interpreting temperature trends and other climatic indicators is complicated. Climate in Alaska is dynamic and nonlinear, with strong linkages to atmospheric and oceanic processes, such as the position of the polar jet stream or the frequency of El Niño events ([Papineau 2001](#)). An important climate pattern, evident in the relatively few long-term climate stations located in parks, is the Pacific Decadal Oscillation (PDO). Much of the warming that has occurred since the middle of the 20th century occurred in 1976 as a stepwise shift, attributed to a climatic transition from a cool to a warm phase in the PDO ([Chapin et al. 2014](#), [Bieniek and Walsh 2014](#)).



Alaska mean annual temperatures from the 1940s to 2016. Notice the step jump in mean temperature in the mid-1970s.

Here is what the data tell us....

PDO index values: January 1900 - January 2017



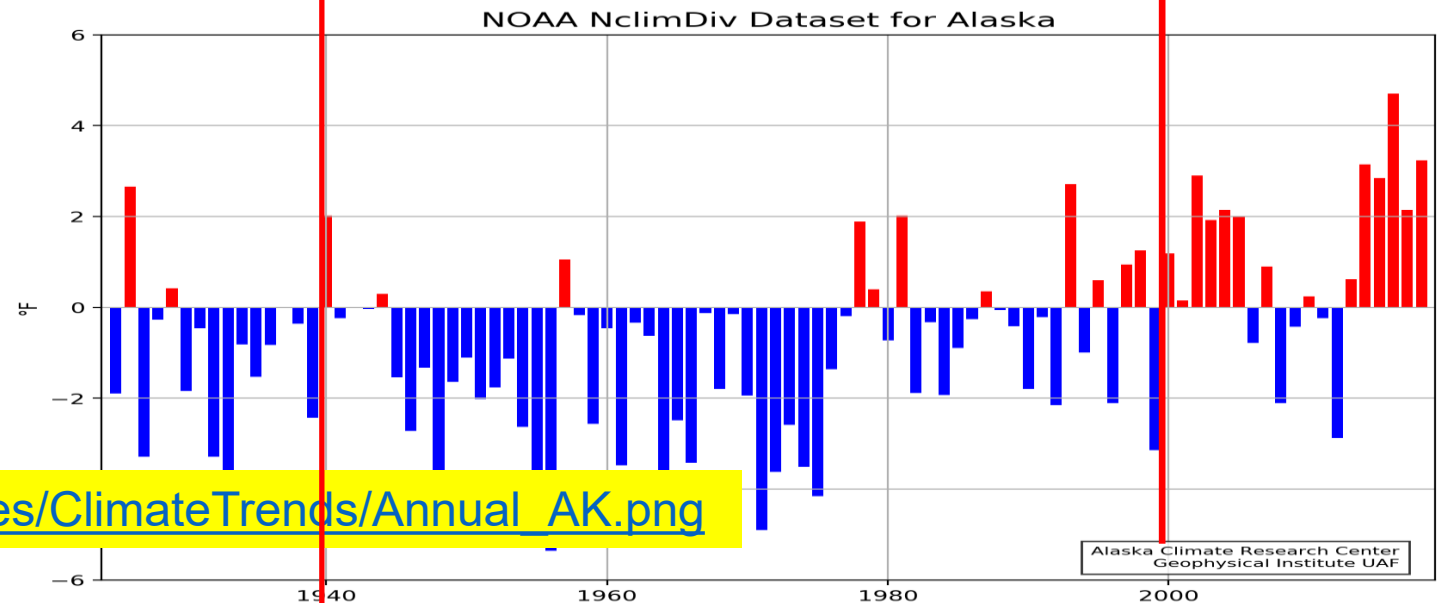
<http://research.jisao.washington.edu/pdo/>

Top: Pacific Decadal Oscillation Index from the University of Washington.

Bottom. Alaska annual Temperature Trends from the University of Alaska.

Alaska's Temperatures are Controlled by the Pacific Decadal Oscillation.

Mean annual air temperature, departure from normal (base: 1981-2010)



http://climate.gi.alaska.edu/sites/default/files/ClimateTrends/Annual_AK.png

Alaska Climate Research Center
Geophysical Institute UAF

Total Change in Mean Seasonal and Annual Temperature (°F), 1977 - 2014

Region	Location	Winter	Spring	Summer	Autumn	Annual
Arctic	Barrow	3.0	4.8	2.5	10.2	5.0
	Bettles	-1.5	-1.3	-0.5	1.6	-0.3
Interior	Fairbanks	-3.4	-2.4	0.9	0.0	-1.1
	Big Delta	0.1	-2.3	0.0	0.3	-0.3
	McGrath	-0.1	0.3	1.7	2.5	1.3
	Kotzebue	-1.7	0.5	0.3	2.6	0.4
West Coast	Nome	-3.7	-2.1	-1.0	0.6	-1.5
	Bethel	-1.4	-2.0	1.3	0.7	-0.3
	King Salmon	-1.9	-2.7	0.3	1.0	-0.6
	St Paul	-3.7	-3.7	-0.6	0.0	-2.0
	Cold Bay	-1.0	-2.7	0.0	0.0	-0.9
	Talkeetna	1.3	0.7	1.8	2.5	1.8
Southcentral	Gulkana	-0.9	-1.5	0.6	-1.5	-0.6
	Anchorage	-1.6	-1.4	-0.4	0.4	-0.6
	Homer	-1.4	-1.6	0.5	0.8	-0.2
	Kodiak	-2.9	-2.9	-0.6	-1.6	-1.9
Southeast	Yakutat	0.3	-2.3	0.7	0.2	-0.2
	Juneau	1.4	-2.2	-0.2	-0.7	-0.3
	Annette	-0.2	-0.8	0.5	0.4	0.1
Average		-1.0	-1.3	0.4	1.1	-0.1

WHAT
Warming?

“And as he flew to the Alaska Arctic, Obama directed Air Force One to descend so he could get a closer look at Kivalina, a village of 400 on a sliver of barrier island that's sinking into the water as sea levels rise.”

Total Change in Mean Seasonal and Annual Temperature (°F), 1977 - 2014

<i>Region</i>	<i>Location</i>	Winter	Spring	Summer	Autumn	Annual
<i>Arctic</i>	Barrow	3.0	4.8	2.5	10.2	5.0
	Interior	-1.5	-1.3	-0.5	1.6	-0.3
<i>West Coast</i>	Fairbanks	-3.4	-2.4	0.9	0.0	-1.1
	Big Delta	0.1	-2.3	0.0	0.3	-0.3
	McGrath	-0.1	0.3	1.7	2.5	1.3
	Kotzebue	-1.7	0.5	0.3	2.6	0.4
	Nome	-3.7	-2.1	-1.0	0.6	-1.5
	Bethel	-1.4	-2.0	1.3	0.7	-0.3
	King Salmon	-1.9	-2.7	0.3	1.0	-0.6
	St Paul	-3.7	-3.7	-0.6	0.0	-2.0
	Cold Bay	-1.0	-2.7	0.0	0.0	-0.9
	<i>Southcentral</i>	1.3	0.7	1.8	2.5	1.8
<i>Southeast</i>	Gulkana	-0.9	-1.5	0.6	-1.5	-0.6
	Anchorage	-1.6	-1.4	-0.4	0.4	-0.6
	Homer	-1.4	-1.6	0.5	0.8	-0.2
	Kodiak	-2.9	-2.9	-0.6	-1.6	-1.9
	Yakutat	0.3	-2.3	0.7	0.2	-0.2
	Juneau	1.4	-2.2	-0.2	-0.7	-0.3
	Annette	-0.2	-0.8	0.5	0.4	0.1
	Average	-1.0	-1.3	0.4	1.1	-0.1

WHAT
Warming?

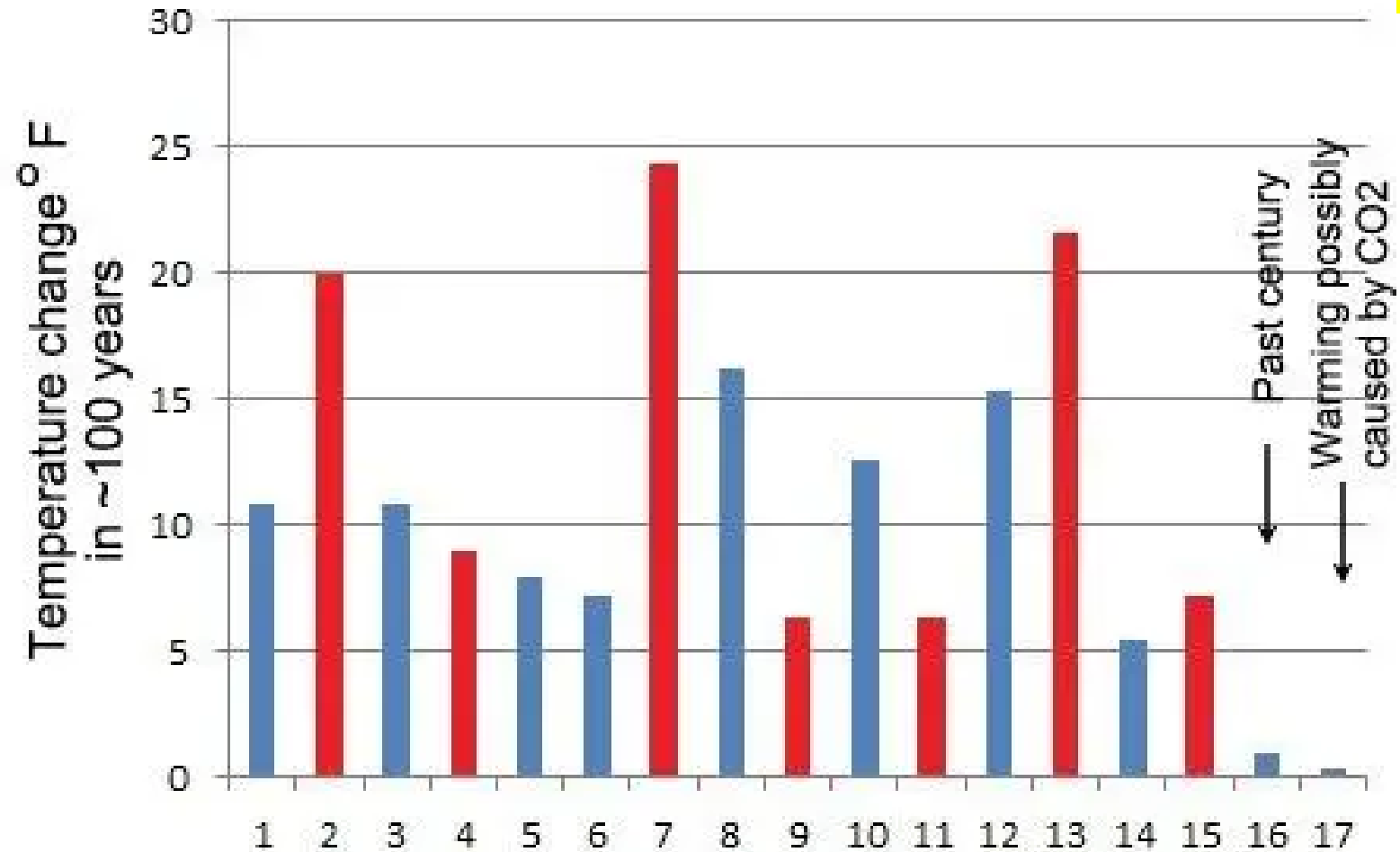
Nearest station to
Kivalina is Nome

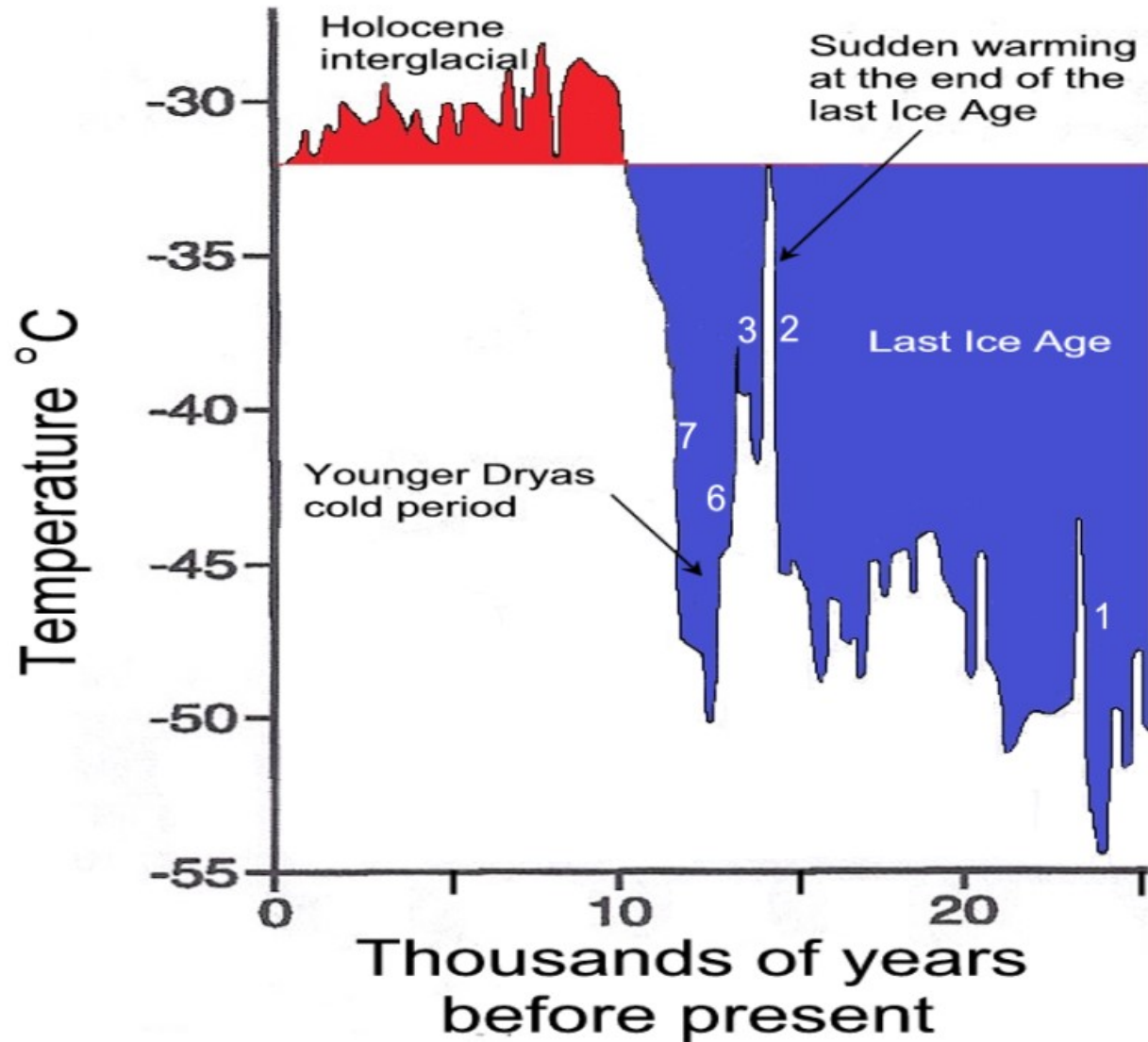
Temperatures at
Nome have fallen by
-1.5F from 1977-2014.

“Global Warming” is
not happening here.

Jason Mark: “See, for example, Alaska, which is warming much faster than other areas of the country and where the very earth itself is coming undone as millennia-old permafrost starts to thaw.”

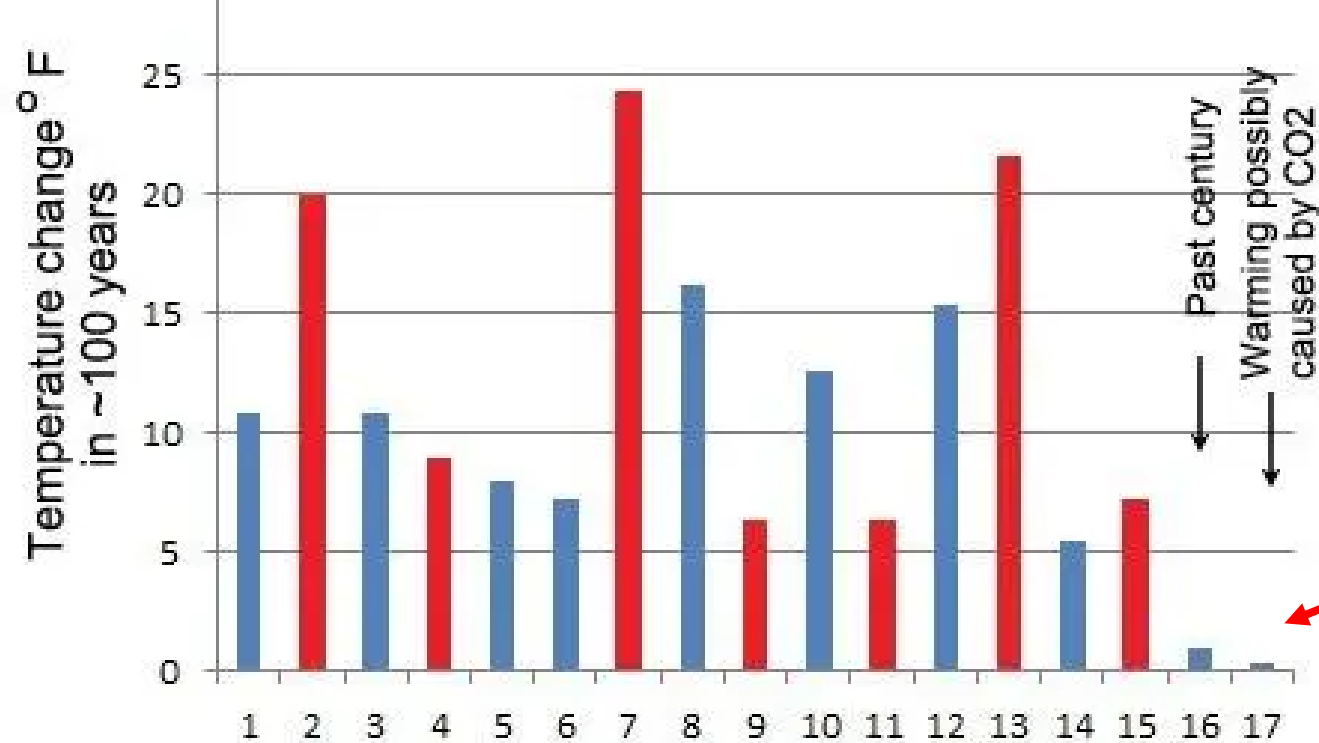
<https://wattsupwiththat.com/2011/01/24/easterbrook-on-the-magnitude-of-greenland-gisp2-ice-core-data/>





The numbers in white identify the periods of rapid warming and cooling we'll see on the next graphic.

Figure 1. Greenland temperatures over the past 25,000 years recorded in the GISP 2 ice core. Strong, abrupt warming is shown by nearly vertical rise of temperatures, strong cooling by nearly vertical drop of temperatures (Modified from Cuffy and Clow, 1997).



Present rate of change in temperature
~1C per century is trivial in comparison
with other times in the Holocene.

Figure 2. Magnitudes of the largest warming/cooling events over the past 25,000 years. Temperatures on the vertical axis are rise or fall of temperatures in about a century.

“Each column represents the rise or fall of temperature shown on Figure 1.”

Event number 1 is about 24,000 years ago and event number 15 is about 11,000 years ago.

The sudden warming about 15,000 years ago caused massive melting of these ice sheets at an unprecedented rate.

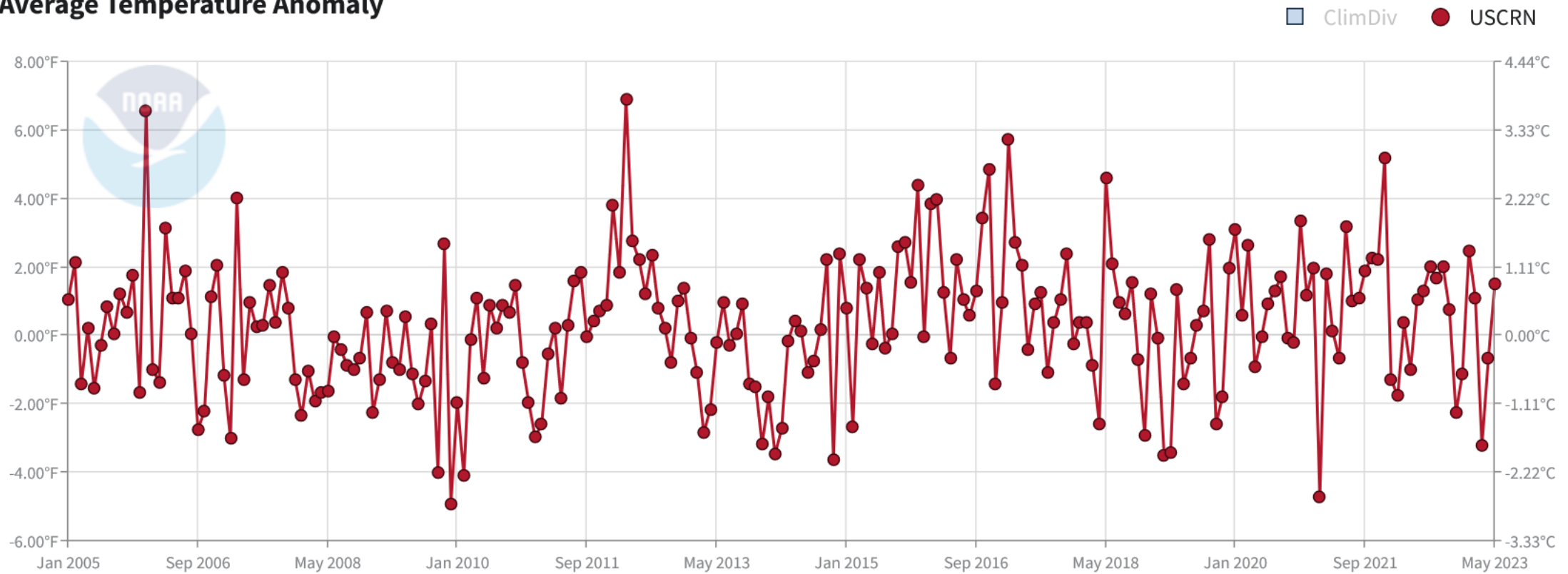
The abrupt cooling that occurred from 12,700 to 11,500 years ago is the Younger Dryas Cold Period, which was responsible for readvance of the ice sheets and Alpine glaciers. After the end of the Younger Dryas cold period **temperatures warmed** by 9°F (5°C) over 30-40 years and **as much as 14°F (8°C) over 40 years.**

More items Sierra Club and editor Jason Mark might uncover with additional and honest academic inquiry:

The government's own data, from the US Climate Reference Network, show stunningly little temperature change in the time domain of the USCRN itself, only eighteen years since 2005, but the **catastrophic warming**, decried by Jason Mark, **is not shown in the data.**

<https://www.ncei.noaa.gov/access/monitoring/national-temperature-index/time-series/anom-tavg/1/0>

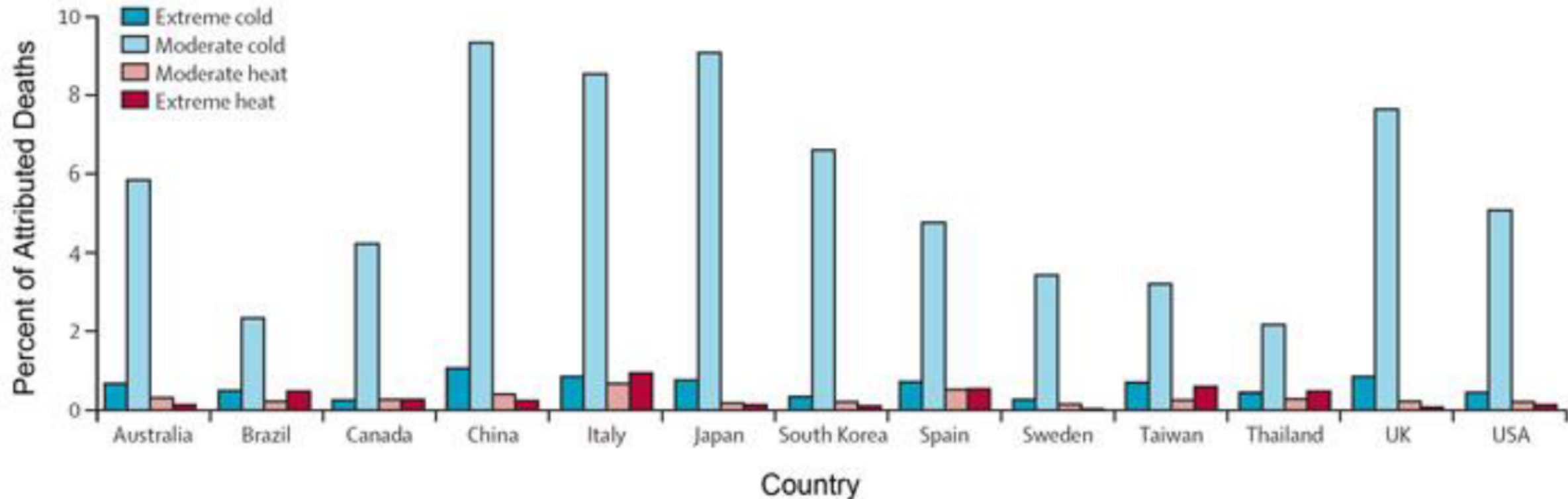
Average Temperature Anomaly



Cold waves kill many more people than heat waves.

If the Alarmists were correct, there'd be a lot more deaths from heat than cold. The Climate Alarm makes no sense.

Percent of Deaths Due to Moderate and Extreme Episodes of Heat and Cold



Fraction of all-cause mortality attributable to moderate and extreme hot and cold temperature by country. (Source: Gasparrini et al., 2015).

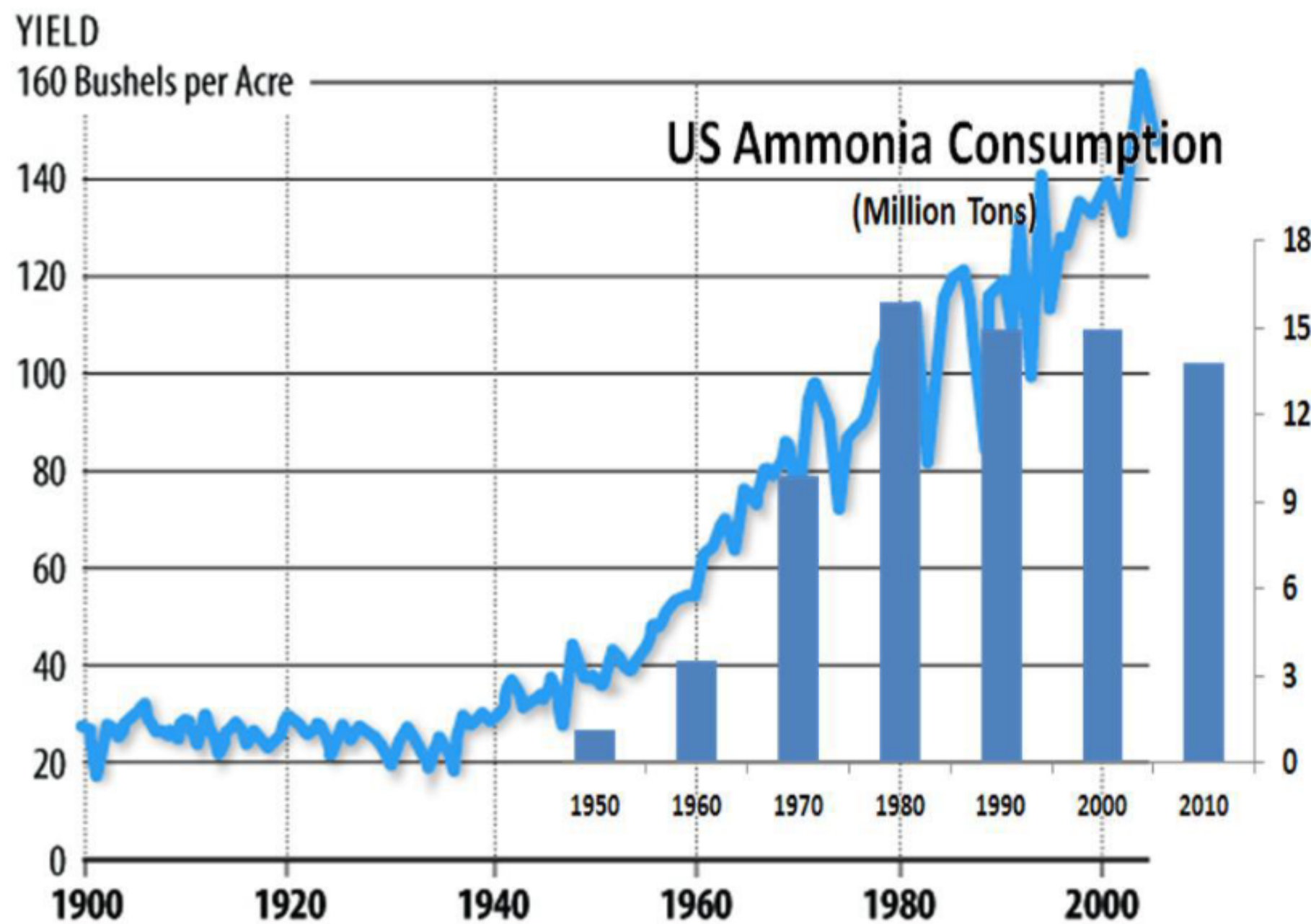
Ammonia consumption goes to the Haber Process which turns natural gas into Ammonium Nitrate fertilizer.

From Wikipedia:

“The Haber process now produces 450 million tons of nitrogen fertilizer per year, mostly in the form of anhydrous ammonia, ammonium nitrate, and urea. Three to five percent of the world's natural gas production is consumed in the Haber process (around 1–2% of the world's energy supply)...

In combination with pesticides, these fertilizers have quadrupled the productivity of agricultural land.”

U.S. Corn Grain Yields, 1900-2005

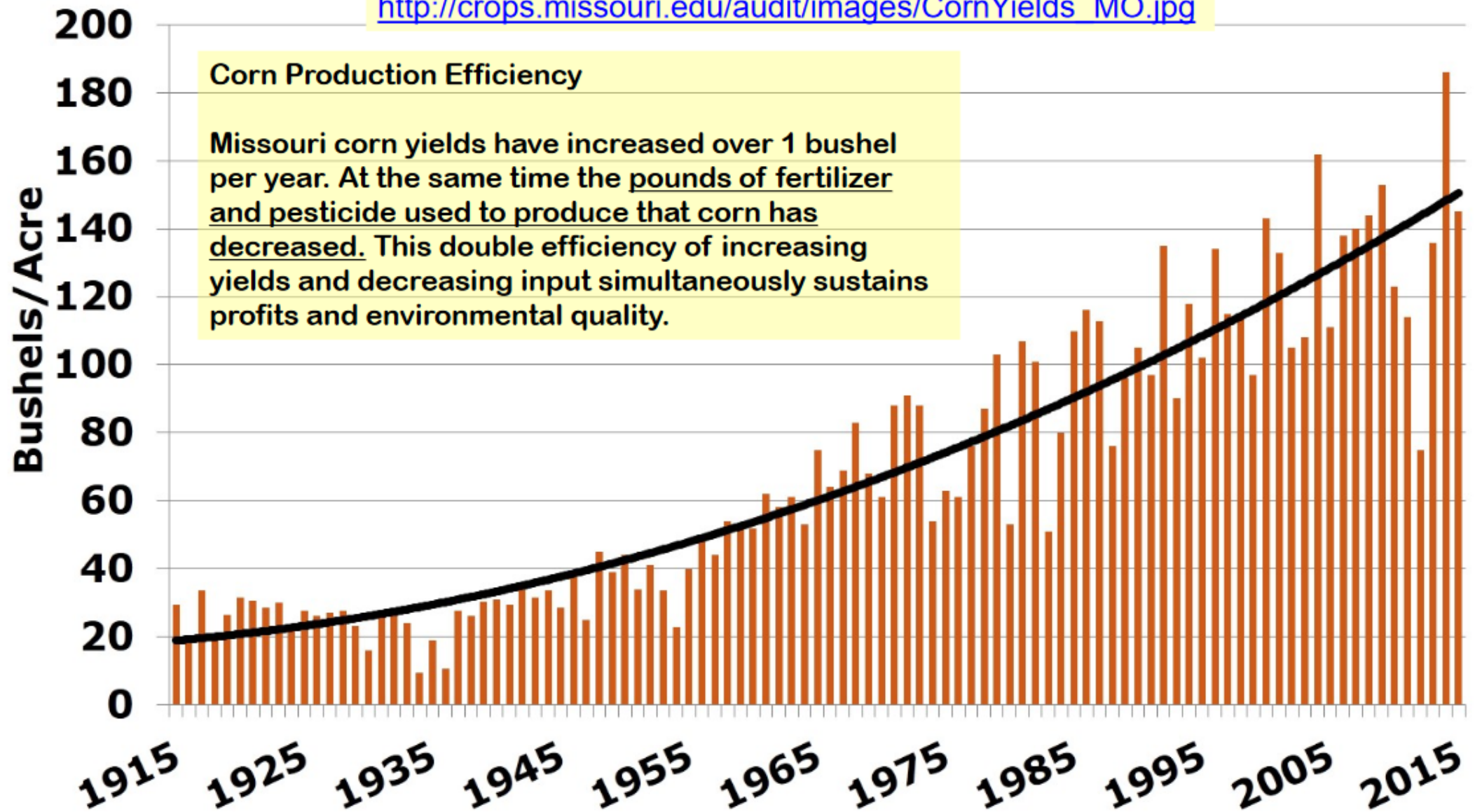


Sierra Club's Jason Mark:

“I have a degree in international relations from Georgetown University and a certificate in ecological horticulture from the Center for Agroecology and Sustainable Food Systems at UC-Santa Cruz.”

A little more honesty by Jason Mark on the increased crop yields with more atmospheric CO2 given his “*certificate in ecological horticulture from the Center for Agroecology and Sustainable Food Systems at UC-Santa Cruz*” might be as instructive to him, as it is to us...

http://crops.missouri.edu/audit/images/CornYields_MO.jpg

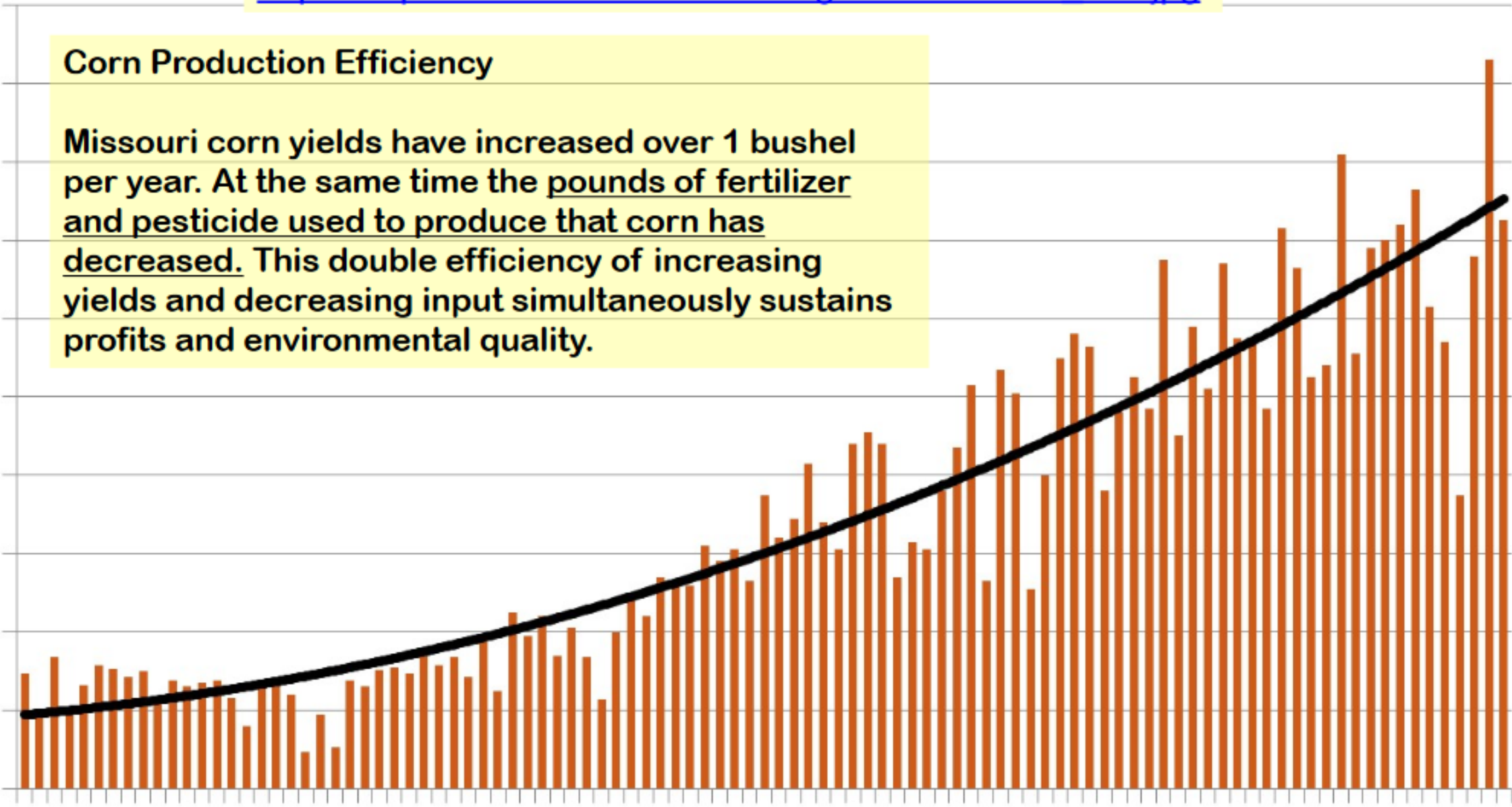


Bushels/Acre

Corn Production Efficiency

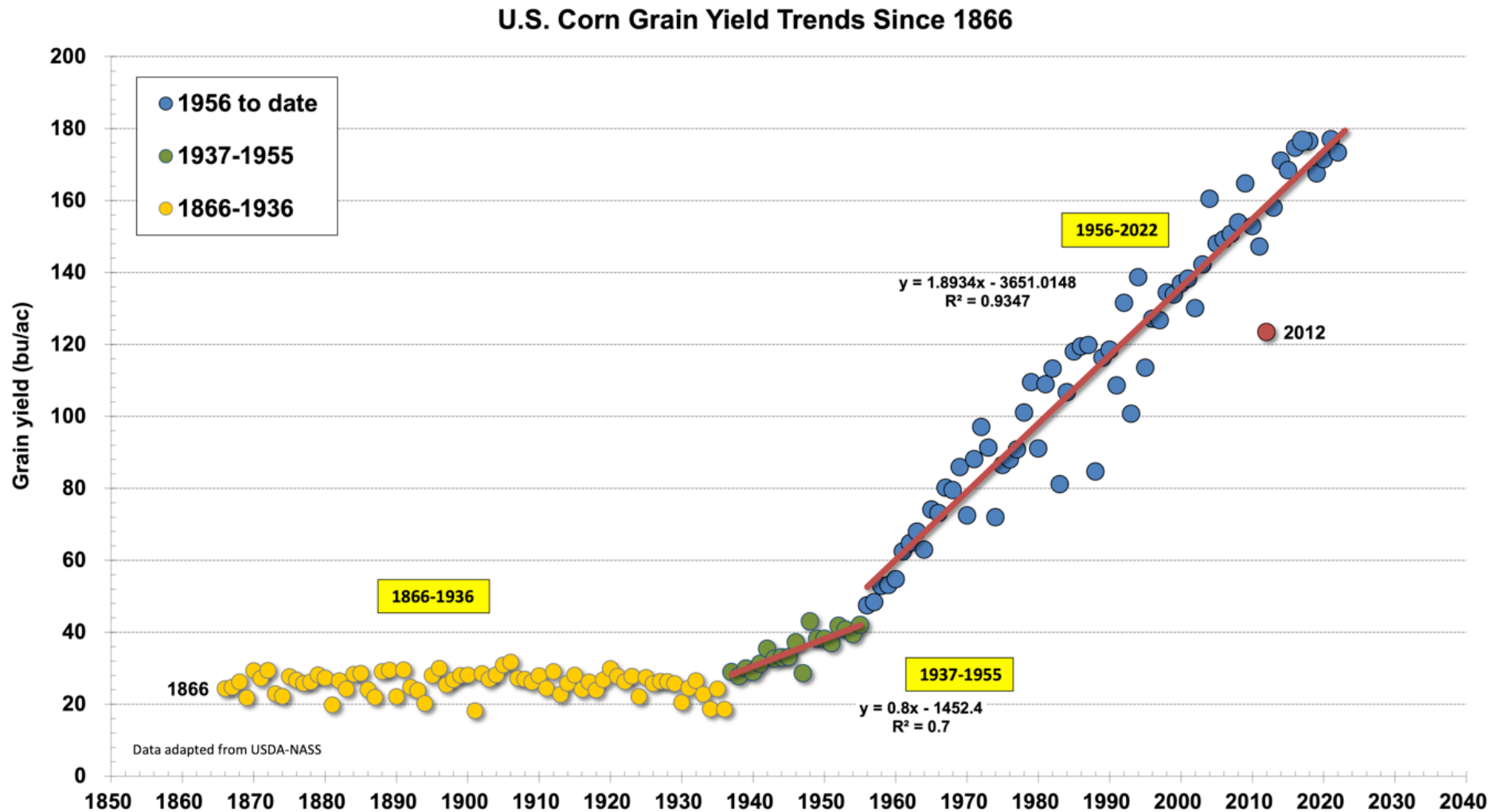
Missouri corn yields have increased over 1 bushel per year. At the same time the pounds of fertilizer and pesticide used to produce that corn has decreased. This double efficiency of increasing yields and decreasing input simultaneously sustains profits and environmental quality.

1915 1925 1935 1945 1955 1965 1975 1985 1995 2005 2015



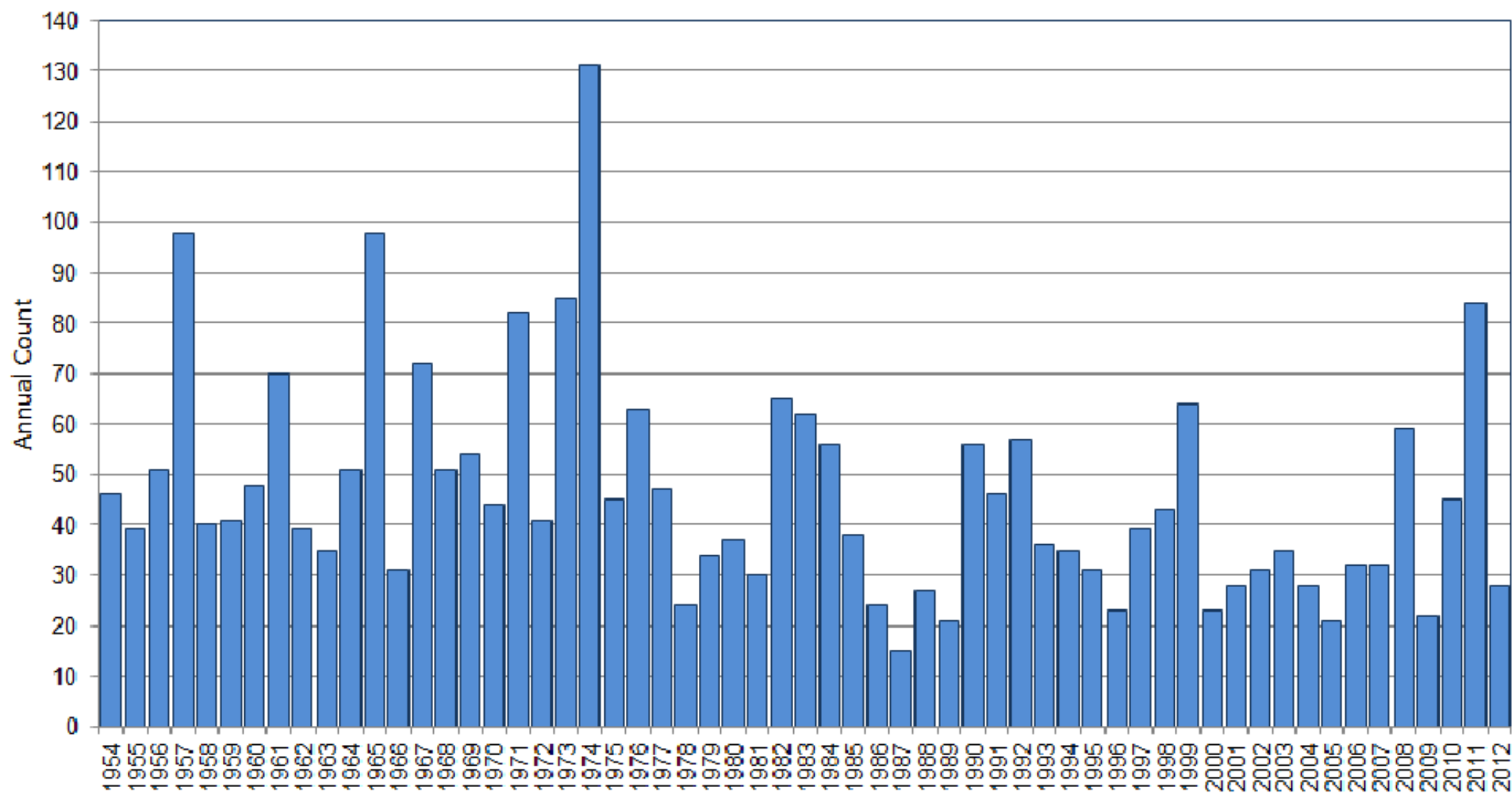
Sierra Club's Jason Mark:

“I have a degree in international relations from Georgetown University and a certificate in ecological horticulture from the Center for Agroecology and Sustainable Food Systems at UC-Santa Cruz.”



<https://www.agry.purdue.edu/ext/corn/news/timeless/yieldtrends.html>

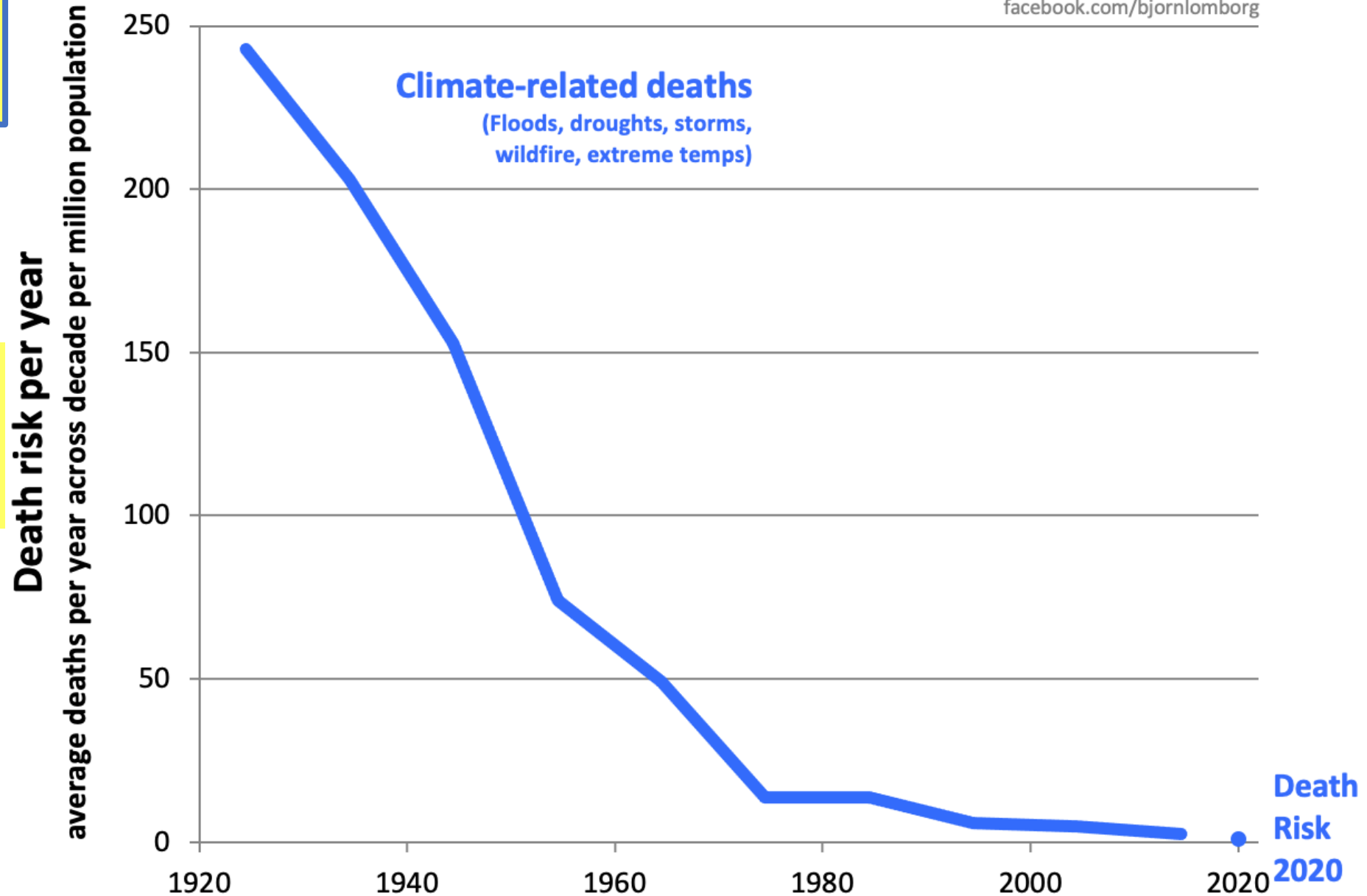
U.S. Annual Count of Strong to Violent Tornadoes (F3+), 1954 through 2012



Source: NOAA/NWS Storm Prediction Center

Climate-related Death Risk 1920-2020

facebook.com/bjornlomborg



OFDA/CRED International Disaster Database, www.emdat.be, deaths averaged over decades 1920-29, 1930-1939, ... 2010-2019, with data from 2020, as start of next decade, accessed January 1, 2021

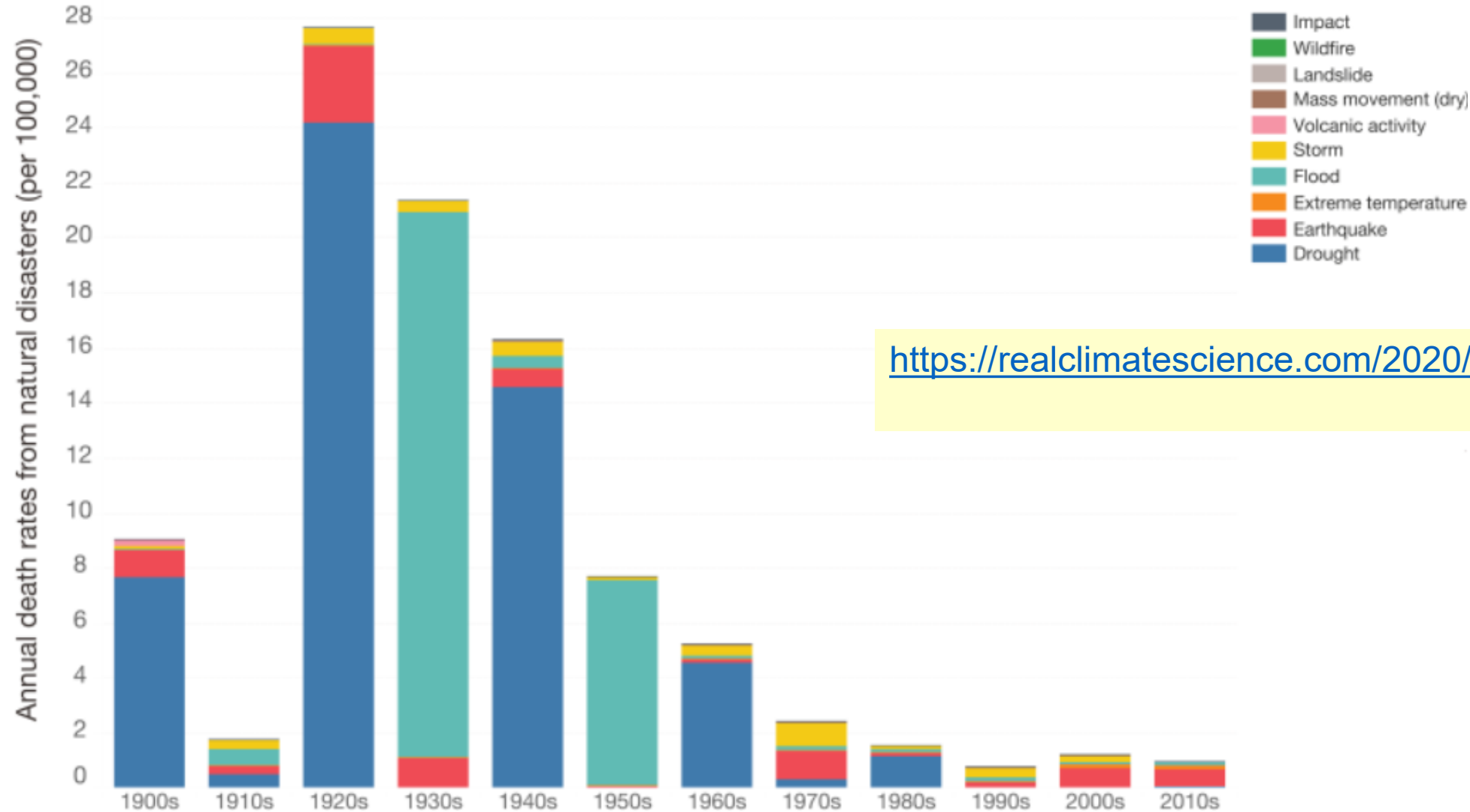
After 100 years of climate change, 'climate related deaths' approach zero

<https://climaterealism.com/wp-content/uploads/2021/01/climate-related-deaths-1920-2020.png>

Global annual death rate from natural disasters, by decade

Global death rate measured as the number of deaths per 100,000 of the world population.

This is given as the annual average per decade (by decade 1900s to 2000s; and then six years from 2010-2015).



<https://realclimatescience.com/2020/12/amplifying-fear/>

Summary and Conclusions

Sierra's Jason Mark attributes the weather events below to being caused by the modest <CO₂> increases. But the episodes Mark cites as being caused by increasing <CO₂> are normal weather events:

“Freakish” Cold and snowy weather in Texas. The snowy conditions and winter 2021's cold temperatures in Texas follow a pattern noted several times in the past.

The 2021 high temperature record set in Washington State was caused by an Omega Block in the upper air pattern, not increasing <CO₂>.

2022's Hurricane Ian's landfall in SW Florida, which killed “dozens,” was nowhere near as strong as 1954's Hurricane Hazel which killed 400-1000.

2022's ‘horrific’ fire season had only ~20% of the number of forest fires which were counted in 1930.

Ice core reconstructions of temperatures show the **current warm period distinctly cooler than 11 of the 12** warm periods of the last ~8,000 years. There is no modern climate “emergency or crisis.”

Decreasing cloud cover ([Pokrovsky, 2019](#)) and changes in the solar irradiance ([Yndestad and Solheim \(2017\)](#)) caused by wiggles in Earth's orbit have caused recent warming, not more <CO₂>

Summary and Conclusions II

Sierra's Jason Mark prides himself on his "Certificate in Ecological Agriculture from UC Santa Cruz."

Mark never mentions that modern increases in Corn (and other crop) yields are because of modern agricultural practices including the Haber Process which turns natural gas, a hydrocarbon fuel, into anhydrous ammonia, ammonium nitrate, and other fertilizers.

Jason Mark never mentions that increasing CO_2 plays a significant role in the increased corn yields, which have increased from ~25 bushels/acre in 1938 to well over 150 bushels/acre today.

I conclude that Jason Mark's writings are distorted propaganda, and dishonest.

Scales of Time: Writing in *Spectator, Australia*, geophysicist Ian Plimer writes

“On a scale of tens of millions of years or more, the Earth’s climate is driven by plate tectonics.”

“On a scale of hundreds of thousands of years, the Earth’s climate is driven by orbital cycles which bring Earth closer to or more distant from the Sun.”

“On a scale of thousands of years to decades, the Earth’s climate is driven by variations in energy emitted from the Sun.”

“If governments, the UN or climate activists want to stop the normal planetary process of climate change, then they need to stop plate tectonics, stop variations in the Earth’s orbit and stop variations in solar output.”

After discussing the impact of the last period of glaciation which reached its maximum 18,000 to 20,000 years ago, Plimer concludes:

“We are putting all our efforts and wasting trillions of taxpayers’ dollars into trying to prevent mythical human-induced global warming, yet we still don’t prepare for the inevitable annual floods, droughts, and bushfires, let alone longer-term solar – and orbitally – driven global cooling.”

“We have a crisis of single-minded stupidity exacerbated by a dumbed-down education system supported by incessant propaganda, driven by financial interests and political activist authoritarianism.”

