

AARP

*CRITIQUE of the June 2021* AARP Bulletin:  
*Climate Change and You*

“How more extreme weather and rising temperatures are affecting our health, wealth, and safety...”



Bob Endlich

[bendlich@msn.com](mailto:bendlich@msn.com)

Cruces Atmospheric Sciences Forum

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# What You Need to Know About Climate Change

I think the subtext is “Human-Caused CO2-fueled Global Warming is causing catastrophe!” “Read All About It!”

How it's already affecting your health, home and safety — and what you can do about it

by David Hochman, Sari Harrar, Laura Petrecca and Brian Barth, **AARP**, June 1, 2021



DAVID MCNEW/SEAN RAYFORD/GETTY IMAGES; GREG RUFFING/REDUX; TAMIR KALIFA/THE NEW YORK TIMES

L to R: Springs Fire In Southern California, 2013; South Carolina flooding caused by Hurricane Florence in 2018; aftermath of Hurricane Katrina in Mississippi, 2005; and ice and snow in Texas, 2021.

The **AARP** graphics come from the digital article:

<https://www.aarp.org/politicssociety/history/info-2021/climate-change.html>

Left to right, Is AARP saying, subliminally:

Fires are rare in southern California?

Hurricanes are somehow new events to Mississippi and South Carolina?

Snowstorms / freezing rain events are unheard of in Texas?

Although not a major focus of this presentation, let's see how many overtly, or covertly, instances where our own government is “ tipping the scales” towards a more climate alarmist point of view.

AARP'S article is structured as follows:

Several paragraphs, which mimic the Alarmist meme

I copied the paragraphs; refuted them with data.

I edited by underlining some of the references for clarity and emphasis.

Several more paragraphs follow:

### Climate change and ...

- Your finances
- Your home
- Your health
- Your lifestyle

I highlighted some of AARP's alarmist phrases and refuted these, also with data.

< AARP > “Remember the Great Texas Freeze this past February? Never-before-seen ice storms crashed trees onto power lines and froze the wind turbines Texans turn (sic) depend on for heat and light. Record-breaking temperatures gave way in some places to snowfalls not seen since the Truman administration. Then the pipelines that supply natural gas to power plants froze up. Families huddled for warmth in the dark for days, and the nation watched their misery on TV.”

Underlined passages are false, misleading. Following stories show freezing rain / ice storms in Texas. Yes, snowfalls occurred during the Truman administration, but Texas' record snowfall, in 1929, I think when Calvin Coolidge was President, was **26 inches**, Hillsboro. Yes, it snows in Texas.

Significant winter weather events occurred over the time Texas' weather records have been kept; they're part of the climate we have at present.

**In Jan 1964, we had freezing rain at Texas A&M, when I was a Basic Meteorology Student;** it's not that rare an event when you look at the history; more data follow.

Maybe Texas doesn't need to depend on weather-sensitive Wind Turbines to generate electricity!

The phrase, “**Never-before-seen ice storms**“ is needlessly sensational, alarmist, and untrue.

While an average winter might not see much snow and freezing rain in Texas, it is not that uncommon for the weather pattern to shift. A major storm, accompanied with a jet stream pattern which brings Arctic air from polar regions directly to central Texas, occurs from time to time.

The 2021 storm was similar to the 2011 storm which brought natural gas disruptions and rolling blackouts to New Mexico, Arizona and west Texas.

In succeeding graphics, weather records show that snow, freezing rain and extremely cold temperatures are **a once-a-decade, even less, feature** of the climate of Texas and other areas not far from the center of continental North America.

These are not “**Never-before-seen storms.**” **AARP is deliberately deceptive.**






Source of extreme weather records.

## All-Time Record Maximum Temperature by State

State	Location	Value	Date	Station ID	Status*
<a href="#">AL</a>	Centerville	112 ° F	September 6, 1925	<a href="#">011520</a>	E
<a href="#">AZ</a>	Lake Havasu City	128 ° F	June 29, 1994	<a href="#">024761</a>	E
<a href="#">AR</a>	Ozark	120 ° F	August 10, 1936	<a href="#">035508</a>	E
<a href="#">CA</a>	Greenland Ranch	134 ° F	July 10, 1913	<a href="#">043603</a>	E
<a href="#">CO</a>	Sedgwick Las Animas	114 ° F	July 11, 1954 July 1, 1933	<a href="#">057513</a> <a href="#">054834</a>	N1A
<a href="#">CT</a>	Torrington Danbury	106 ° F	August 23, 1916 July 15, 1995	<a href="#">068438</a> <a href="#">061762</a>	E1
<a href="#">DE</a>	Millsboro	110 ° F	July 21, 1930	<a href="#">076020</a>	E
<a href="#">FL</a>	Monticello	109 ° F	June 29, 1931	<a href="#">085879</a>	E

# Records

State:  Element:  Download

STATE	ELEMENT	VALUE	DATE	LOCATION	STATION ID
Texas	Maximum Temperature	120°F	Aug 12, 1936	Seymour	418221
			June 28, 1994	Monahans	415999
Texas	Minimum Temperature 	-23°F	Feb 12, 1899	Tulia 6NE	419176
			Feb 8, 1933	Seminole	418201
Texas	24-Hour Precipitation 	42 in.	July 25 - 26, 1979	Alvin	
Texas	24-Hour Snowfall 	26 in.	Dec 20 - 21, 1929	Hillsboro	414182

The notion that Texas' Feb 2021 storm was somehow record-breaking or unprecedented is refuted with Texas' weather records, observations of heavy rain, snowstorms and freezing rain events.



**BRIEF SIDEBAR:** Examining extreme rainfall and the false notion that human-caused CO<sub>2</sub>-fueled conditions are increasing the number of extreme rainfall events in the US, globally.

Texas	Maximum Temperature	120°F	Aug 12, 1936	Seymour	418221	E1
			June 28, 1994	Monahans	415999	E1
Texas	Minimum Temperature ⓘ	-23°F	Feb 12, 1899	Tulia 6NE	419176	SA1
			Feb 8, 1933	Seminole	418201	E1
Texas	24-Hour Precipitation ⓘ	42 in.	July 25 - 26, 1979	Alvin		EA
Texas	<div data-bbox="529 711 2333 1168" data-label="Text"> <p><b>Texas All-Time Greatest 24-Hour Precipitation</b> <span style="float: right;">✕</span></p> <p>The 24-hour rainfall of 42.00 inches was reported from an observer 8.5 miles west of Alvin, Texas between 7 AM July 25th and 7 AM July 26th, 1979 in conjunction with Tropical Storm Claudette. Observer reported that the 10-inch gauge was overflowing at his 1 AM reading, and so the 42 inches may be underreported by at least 3 inches. This 42.00-in rainfall exceeds any observed 24-hr precipitation value for the United States. 43.00 inches of rain in this storm is acknowledged as the United States national record 24-hr precipitation amount, but that value appears to have been estimated in a post-storm survey and is therefore not listed here.</p> </div>					
Texas	Hail: Circumference ⓘ	19.73 in.	April 28, 2021	1 SSW Hondo	N/A	SA

## US Rainfall Records confound the “heavy rainfall is increasing” claim

Right: the record book for extreme precipitation in the US.

**There are no recent records** set in the Continental US.

The 24-hour record was set in 1979.

1-minute, 1956

5-minute, 1960

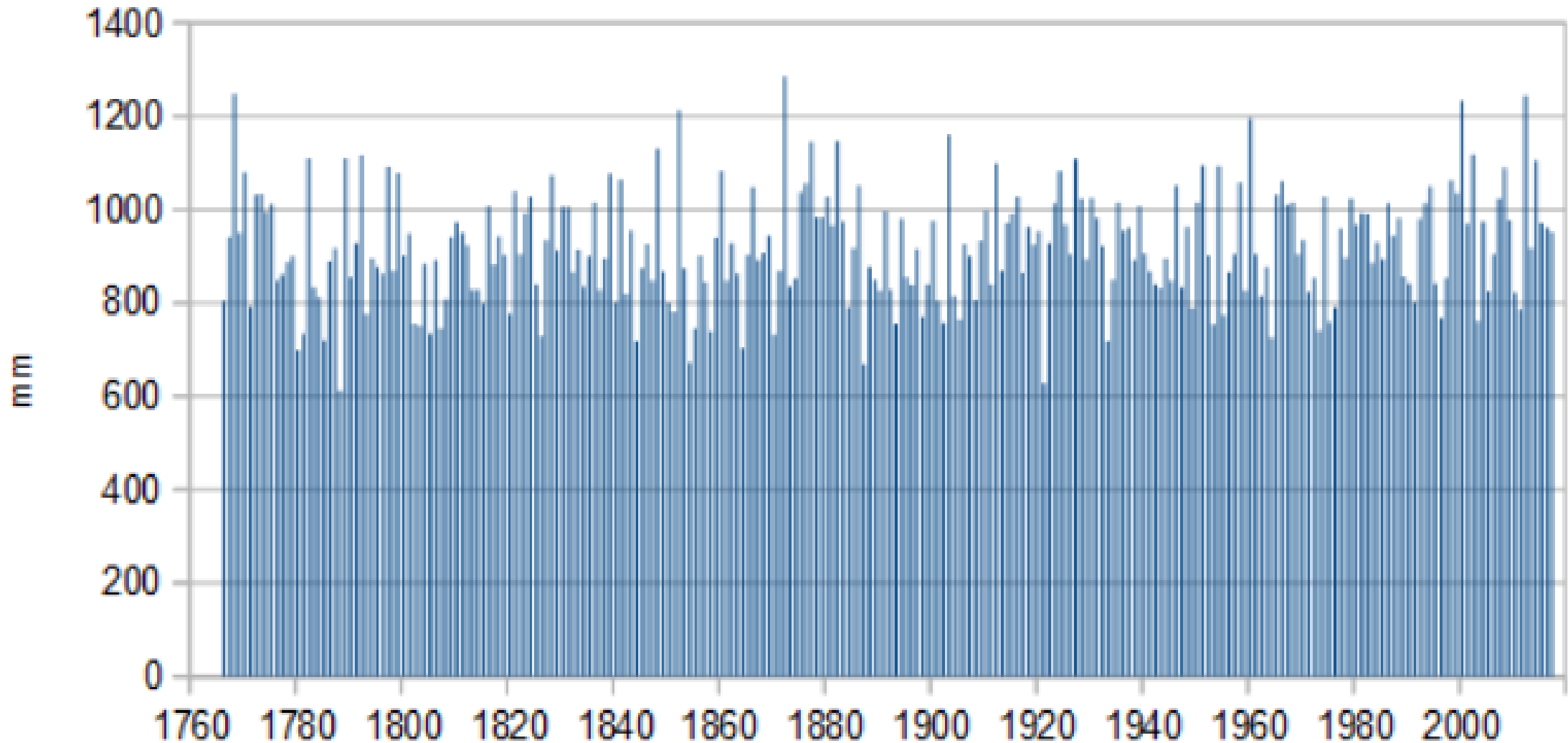
[Extreme Weather: A Guide & Record Book – Christopher C. Burt – Google Books](#)

### U.S. Record Point Rainfalls

<i>Time</i>	<i>Rainfall</i>	<i>Location</i>	<i>Date</i>
1 minute	1.23"	Unionville, MD	7/4/1956
5 minutes	2.03"	Alamogordo Creek, NM	6/5/1960
12 minutes	2.30"	Embarrass, WI	5/28/1881
15 minutes	3.95"	Galveston, TX	6/4/1871
30 minutes	7.00"	Cambridge, OH	7/16/1914
40 minutes	9.25"	Guinea, VA	8/24/1906
42 minutes	12.00"	Holt, MO	6/22/1947*
1 hour	13.80"	Central WV	5/4-5/1943
1 hour 30 minutes	14.60"	Central WV	5/4-5/1943
2 hours	15.00"	Woodward Ranch, (D'Hanis) TX	5/31/1935
2 hours 30 minutes	19.00"	Rockport, WV	7/18/1889
2 hours 45 minutes	22.00"	Woodward Ranch, (D'Hanis) TX	5/31/1935*
3 hours	28.50*est.	Smethport, PA	7/18/42*
4 hours 30 minutes	30.70"	Smethport, PA	7/18/42*
12 hours	34.30"	Smethport, PA	7/17-18/1942
18 hours	36.40"	Thrall, TX	9/9/1921
24 hours	43.00"	Alvin, TX	7/25-26/1979
4 days	62.00"	Kukaiau, Hamakua, HI	2/27-3/2/1902
8 days	82.00"	Kukaiau, Hamakua, HI	2/27-3/6/1902
1 month	148.83"	Mt. Waialeale, Kauai, HI	3/1982
1 month (mainland)	71.54"	Helen Mine, CA	1/1909
1 year	704.83"	Kukui, Kauai, HI	1982
1 year	332.29"	MacLeeod Harbor, AK	1976

The data show that since the Little Ice Age, there is no modern increase in rainfall with higher <CO2>

## England & Wales Annual Rainfall 1766 - 2017



**End Sidebar**

<https://www.onlyinyourstate.com/texas/winter-storms-tx/>

Posted in [Texas](#) | [Nature](#) February 10, 2021 by [Katie Lawrence](#)

## **It's Impossible To Forget These 5 Horrific Winter Storms That Have Gone Down In Texas History**

Harsh winter weather isn't exactly a typical thing here in Texas, so we definitely remember the times when it does happen. A few rare years have brought huge blizzards or ice storms that we'll never forget – they caused destruction and death, and have left a lasting mark on the Lone Star State. Here are five of the absolute worst winter storms in Texas:

## 1. Panhandle Blizzard of 1957



YouTube/GCC Studios

This storm was a truly rare phenomenon considering how late in the season it took place.

## 2. San Antonio Snowstorm of 1985

The recurrence period for heavy winter snow for San Antonio, Texas, is 100 years, even more.



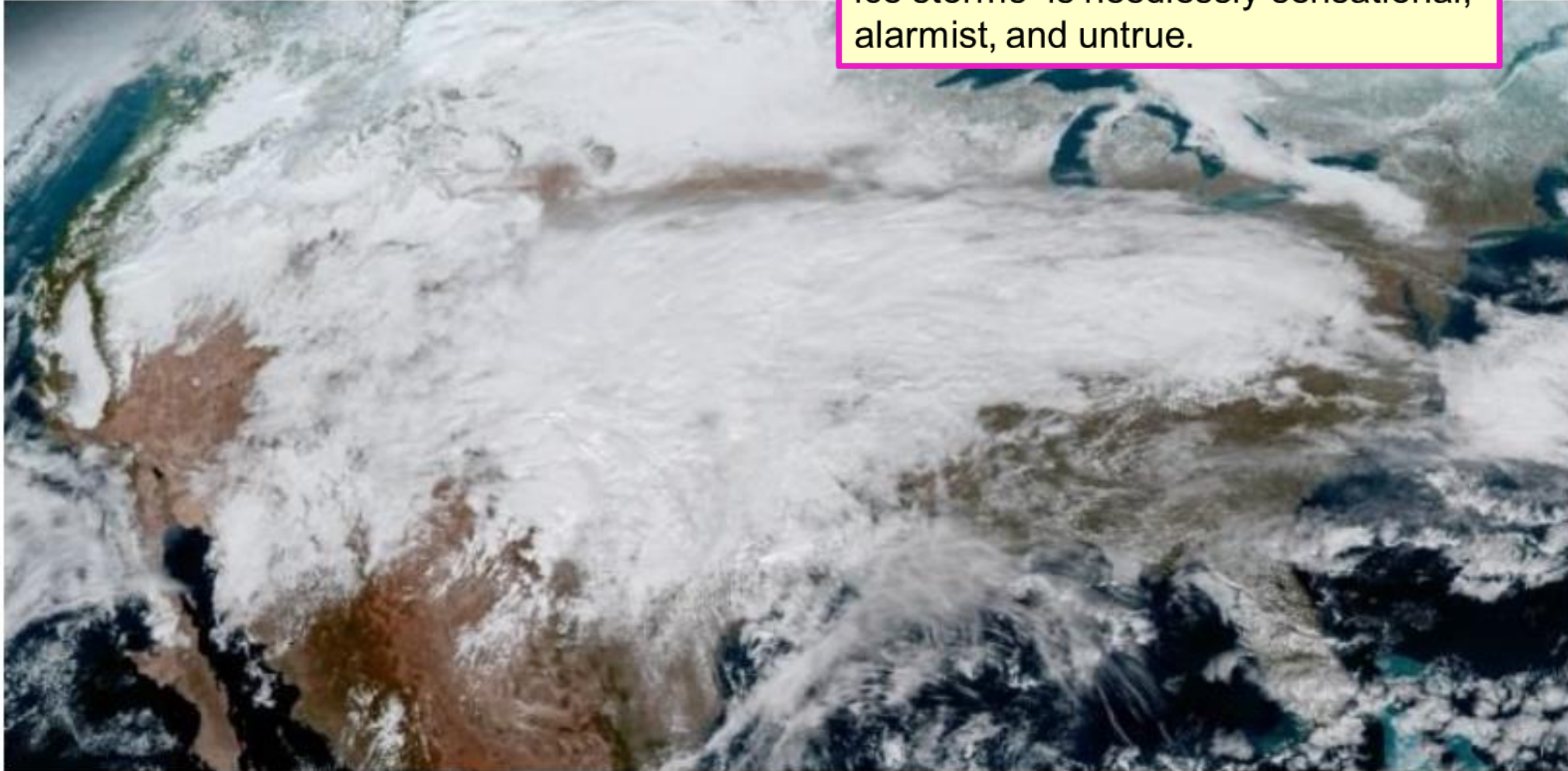
YouTube/Mark Langford

Leaving the city buried under more than a foot of snow, this January winter storm was the worst snow San Antonio had seen in over 100 years. The mayor ordered citizens to essentially shelter in place, instructing businesses to remain closed until the snow was melted and roads were no longer icy. It sure looks like the children made the most out of the situation!



#### 4. North American Ice Storm of 2017

AARP's phrase, "Never-before-seen ice storms" is needlessly sensational, alarmist, and untrue.



Wikipedia

The worst ice storm in 10 years covered nearly 1,000 miles and caused downed trees, power outages, and deadly driving conditions. Some of the worst conditions happened in northwestern Texas, with ice accumulation on the roads as well as snowfall.

# WORST WINTER STORMS IN TEXAS

February 15, 2021

*Leah*

## **How often does it snow in Texas?**

Texas is not known to be a very snowy state. According to data gathered by the NOAA, most of the Lone Star State gets less than an inch of snow per year on average. West Texas, in places like Amarillo and El Paso, gets more snow than the rest of the state – some areas receiving over 10 inches of snow each year on average. Areas like the Gulf Coast and South Central Texas often get no snow at all. Overall, most of Texas gets snow around or less than one day per year, making it quite rare when it gets a lot of snow.

## **What years have there been the coldest temperatures in Texas?**

When you consider that the average winter temperature for many areas of Texas is around 50 degrees, temperatures below freezing definitely stand out. There have been some truly chilling moments in the state's history, however, that go far below not only freezing but zero degrees. In both 1899 and 1933, Texas recorded incredibly low temperatures that have stuck in the record books. The lowest temperatures recorded those days – in Tulia, Texas in 1899 and Seminole, Texas in 1933, both in February – was -23 degrees F. Now that's cold!

## TEXAS CITRUS GROWERS FEAR CROP IS DESTROYED

By David Maraniss **December 24, 1989**

AUSTIN, TEX., DEC. 23 -- This week's nationwide deep freeze apparently did its worst economic damage in the southern tip of Texas, where citrus farmers in the Rio Grande Valley fear that their entire remaining crop of grapefruits and oranges -- worth an estimated \$60 million -- may have been destroyed by below freezing temperatures.

**For south Texas, whose economy is largely dependent on the winter growing season, the icy weather arrived at precisely the wrong time: just as growers were recovering from a December 1983 freeze that reduced the citrus acreage by half and nearly ruined the industry.**

Trees planted after that freeze were only this year producing a bountiful harvest at good prices. "We're on our knees right now, and the fight is just about over. **Mother Nature has another knockout,**" said Claus Eggers, owner of Eggers Acres, a 100-acre grapefruit farm in Mission, a few miles from the Mexican border. The grapefruit season in Texas, which produces about 20 percent of the nation's supply, runs from October through April. When the freeze struck late Thursday, more than 70 percent of the year's crop of Ruby Red grapefruits, the state's specialty, had yet to be picked.



## **Production, Utilization and Demand**

**Merritt Taylor, Charles Hall and Gustavo Molina\***

**The Texas citrus industry was devastated by the December 1983 freeze**, which destroyed more than 47,000 of the Rio Grande Valley's 69,000 acres of citrus, and subsequently by the December 1989 freeze which destroyed about 24,000 of the existing 35,700 acres of citrus.

Because of these freezes, changes have occurred in the Texas citrus industry, and full recovery to 1983 pre-freeze production levels is still years away.

However, it is projected that citrus acreage will return to only about 60 percent of pre-freeze levels.

As growers continue to plant orchards, all sectors of the industry are planning and implementing efforts to improve the overall position of Texas citrus in the marketplace.



**Production, Utilization and Demand**  
**Merritt Taylor, Charles Hall and Gustavo Molina\***

Data on production and utilization of Texas citrus during the post-1989 freeze recovery period indicate that the industry has not returned to pre-freeze levels.

A base set of data comprised of an average of the 5 years immediately preceding the 1983 freeze is used for comparison purposes.

**Grapefruit and orange production levels between the 1983 and 1989 freezes did not equal the pre-1983 freeze production levels before the next freeze hit in 1989.**

The average production levels during 1983-1989 were 67 percent of the 5-year period preceding the 1983 freeze for grapefruit and 35 percent for oranges.

These production levels fell to zero after the 1989 freeze for the 1990-91 season.

The Texas citrus industry began a slow recovery that continued through the 1993-94 production year.

**<AARP>** “Now let's recall the California fires of 2020, with nearly 10,000 blazes that consumed more than 4.2 million acres of forest and killed 33 people. The North Complex fire alone was responsible for more than 300,000 acres of scorched land, leaving 16 people dead in its wake.

Last year's fire season was the worst in California history, claiming countless ancient redwoods and sequoias and changing the natural face of the Golden State forever.

Once again, extreme weather played a role: Lightning and a record-breaking heat wave, combined with Diablo and Santa Ana winds, sparked wildfires that kept California on the nightly news for much of the summer.”

**< AARP:> “Last year's fire season was the worst in California history.” “the California fires of 2020, with nearly 10,000 blazes that consumed more than 4.2 million acres of forest and killed 33 people.”**

This statement is only partially true. Consider these historical estimates.

[https://en.wikipedia.org/wiki/List\\_of\\_California\\_wildfires](https://en.wikipedia.org/wiki/List_of_California_wildfires)

“This is a partial and incomplete list of California wildfires. California has dry, windy, and often hot weather conditions from spring through late autumn that can produce moderate to severe wildfires. **Pre-1800**, when the area was much more forested and the ecology much more resilient, 4.4 million acres of forest and shrubland burned annually.[1]”

**Wildfires in California are growing more dangerous because of the accumulation of wood fuel in forests, higher population and greater electricity transmission and distribution lines**

However, from a historical perspective, it has been estimated that prior to 1850, about 4.5 million acres burned yearly, in fires that lasted for months, with wildfire activity peaking roughly every 30 years, when up to 11.8 million acres of land burned.[7][8]

The much larger wildfire seasons in the past can be attributed to the policy of Native Californians regularly setting controlled burns and allowing natural fires to run their course, which prevented devastating wildfires from overrunning the state.[7]

## **Human-caused ignitions spark California's worst wildfires but get little state focus**

by Bettina Boxall, San Diego Union Tribune, 5 Jan 2020

“But the widespread (*2019 PG&E electrical*) shut-offs underscore the huge — and often overlooked — role that human-related ignitions play in California wildfire.

It doesn't matter how dry the vegetation, how fierce the winds or how high the temperature; if there is no ignition, there is no wildfire.

**Outside the Sierra Nevada and the state's northernmost tier, there is little lightning, nature's ignition source.**

That means that, in much of California, **more than 90% of the wildfires are started by people or their equipment. In coastal counties from Sonoma to San Diego, almost all the starts are human-related.**

Of the known causes of **the state's 20 most destructive wildfires, all are human-related.** Half were started by power line or electrical problems, including the two most devastating, the Camp fire, which incinerated 18,804 buildings, and the 2017 Tubbs fire, which killed 22 people and destroyed 5,636 structures.

The scientists also concluded that **people have dramatically expanded the fire season** — extending it by far more than a warming climate — **because they start fires virtually year-round.”**



Human starts aren't just a California problem. Researchers who analyzed two decades of U.S. records found that, from 1992 to 2012, **human activity was responsible for 84% of the wildfires and 44% of the area burned nationally.**

**“We’ve forgotten the importance of human ignitions in the mix of this,”** said Jennifer Balch, lead author of the 2017 paper, which was published in the Proceedings of the National Academy of Sciences.

The overall number of ignitions in California has declined since 1980, but the area burned in different parts of the state has either not changed or increased...

The number of power line-sparked fires has not dropped, and those fires have burned far more acreage since 2000 than during the prior two decades.

**The state’s power distribution infrastructure is aging, and the electrical grid has expanded as development pushes farther into wildlands.**

Widespread power shutdowns have not been in play long enough to ascertain if they are effective

The cause of California’s biggest 2019 wildfire, the Kincadee fire, is still officially under investigation. But PG&E has said **a high-voltage transmission line that was not powered down during a late October blackout experienced problems near the origin of the blaze, which destroyed 374 structures.**

<http://www.mercurynews.com/2017/10/11/wine-country-fires-gov-brown-vetoed-2016-bill-aimed-at-power-line-wildfire-safety/>

News California News

## Wine Country fires: Gov. Brown vetoed 2016 bill aimed at power line, wildfire safety



California's fire problem has existed a long time.

This story might give a clue as to one cause.



Fallen electrical lines on Parker Hill Road in Santa Rosa on Tuesday. (Nhat V. Meyer/Bay Area News Group)

## California Says PG&E Power Lines Caused Camp Fire That Killed 85

Electrical transmission lines belonging to Pacific Gas & Electric caused the Camp Fire of 2018, California's deadliest wildfire, a state agency concluded on Wednesday.

The fire, which started on Nov. 8, killed 85 people and destroyed nearly 19,000 homes, businesses and other buildings.

The California Department of Forestry and Fire Protection, or Cal Fire, said on Wednesday that, after a "very meticulous and thorough investigation," it had determined that the Camp Fire was caused by "electrical transmission lines owned and operated" by PG&E.

The company had said in February that its equipment had probably caused the fire.

Let's consider another reason for the increase in fires:

The **human-caused increase in fuel loads.**

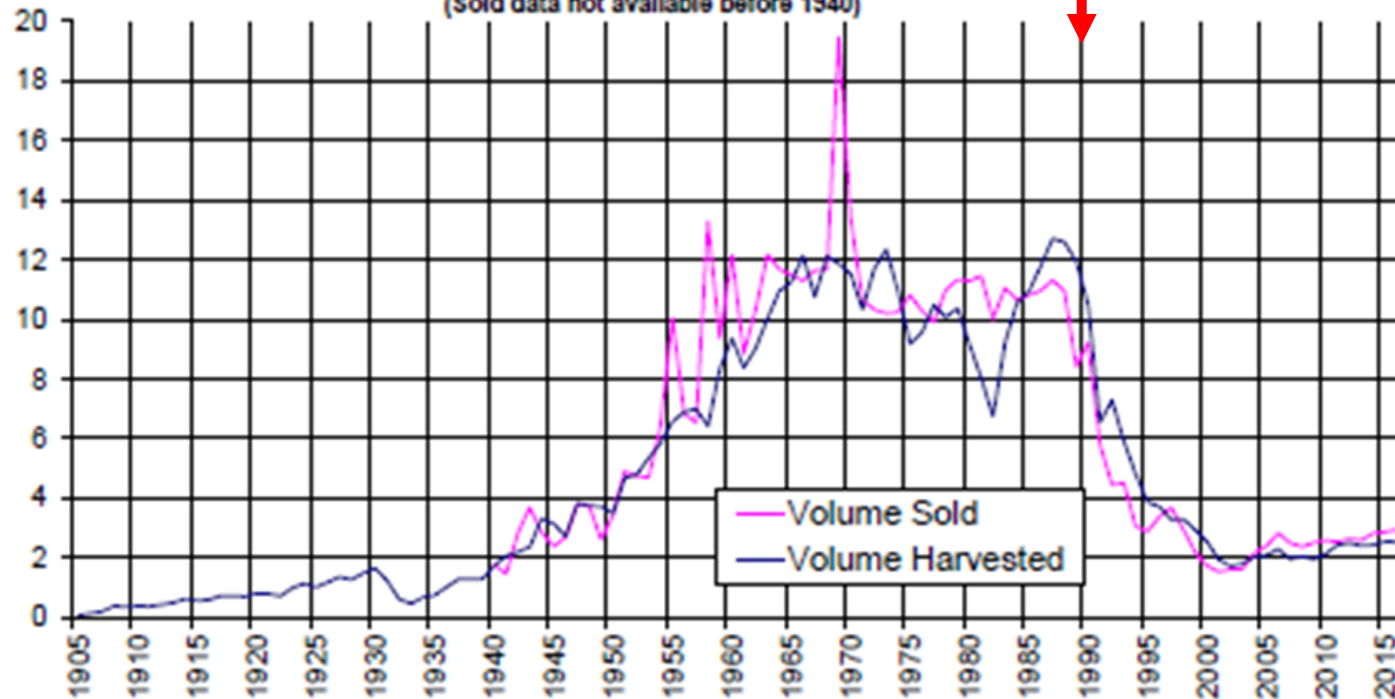
From the 1990s, the **Spotted Owl Decision.**

Earlier **Wikipedia** reference did not tell us that the  
“*accumulation of wood fuel in forests,*” was the  
Spotted Owl Decision.

### 1990s Spotted Owl controversy

- Spotted Owl listed as a threatened species under the Endangered Species Act in 1990 throughout its range in northern California, Oregon, and Washington.
- 1991 Court order halted logging on national forests in those states on grounds those forests were prime spotted owl habitats.
- Logging all but stopped on western forests as the graph shows.  
Precipitous logging decline after 1990 is especially telling.

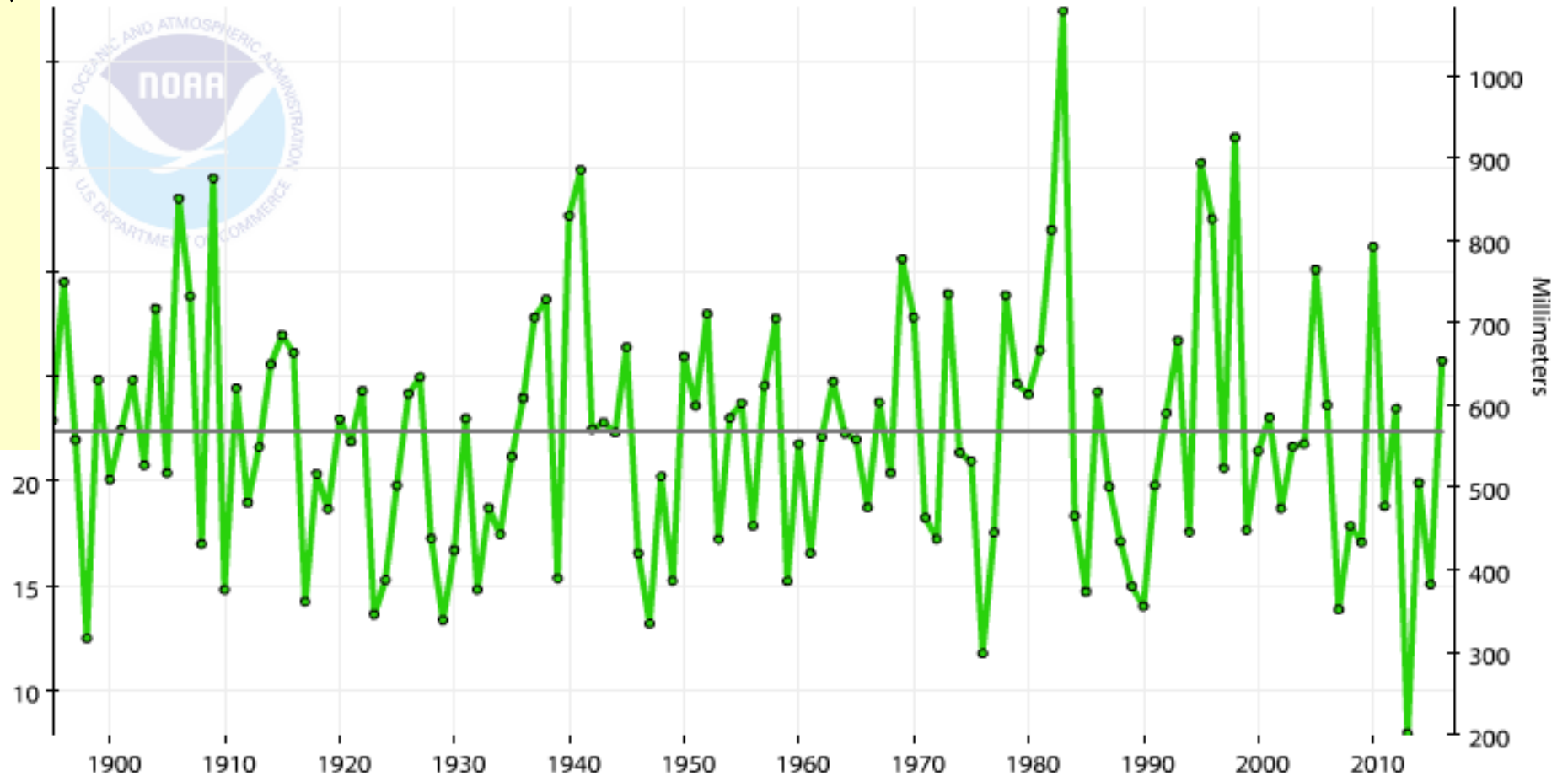
**TIMBER SOLD AND HARVESTED**  
**1905-2016**  
National Forest System  
(Sold data not available before 1940)



Red arrow points to 1990

### California, Precipitation, January-December

— 1901-2000 Mean: 22.39"    ■ Precip

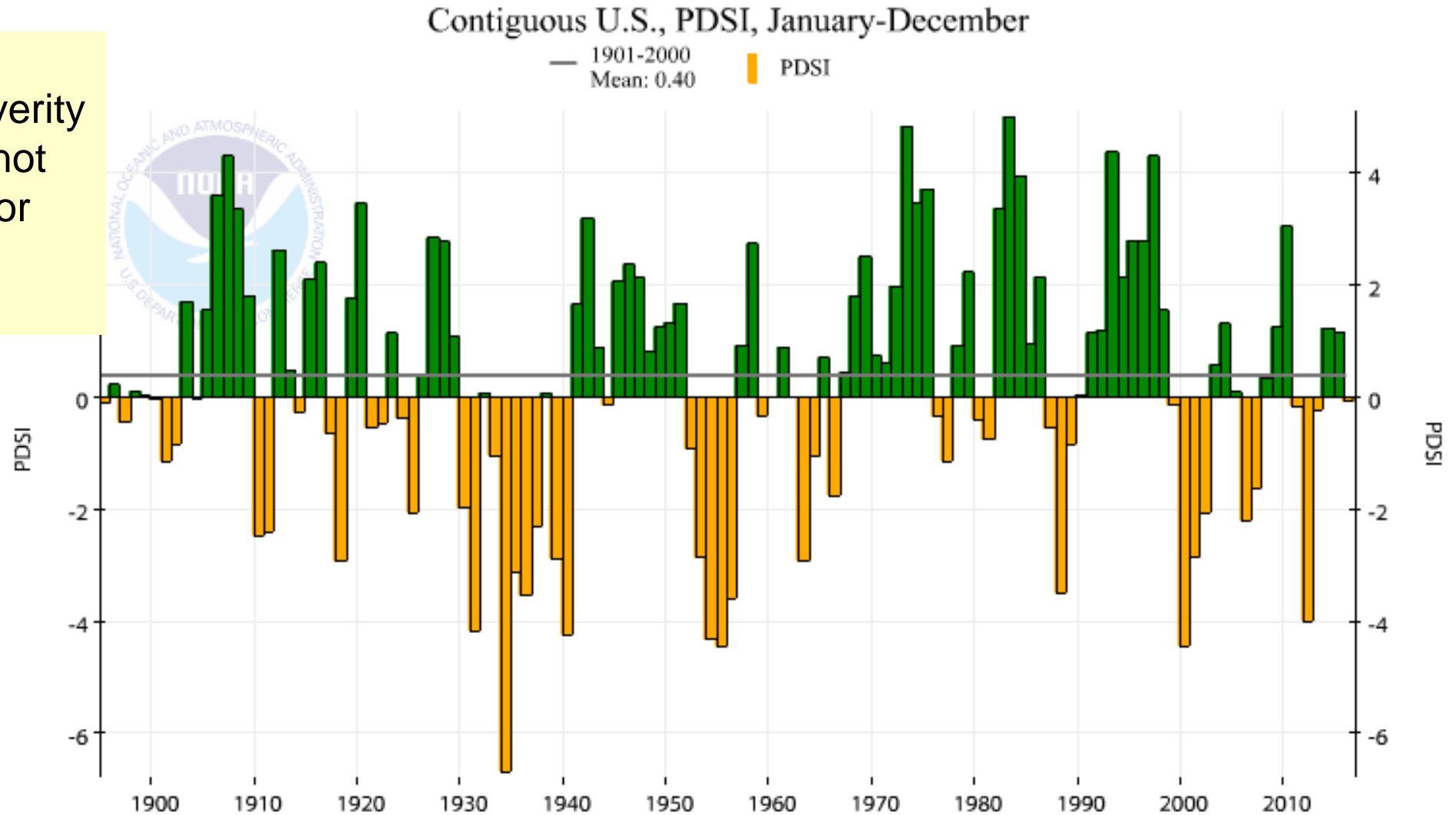


Despite wet and dry years, there is little indication that there is long term drying in California.

This chart should dispel the notion that “climate change” is making California’s fires worse.

Rainfall has not changed much in California as the climate has warmed.

The Palmer Drought Severity Index for the USA does not show long-term drying, or drought increasing.



The Palmer Drought Severity Index since the late 1800s does not show increasing Drought Severity in the United States as the climate has warmed.

What Follows: The reason for seasonal fires in California



CALIFORNIA

## Here's Why October Is California's Most Dangerous Month for Wildfires

“....October ...most dangerous month for California wildfires as dry vegetation and seasonal winds fuel speedy flames.

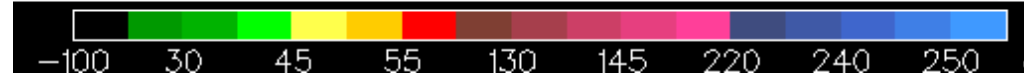
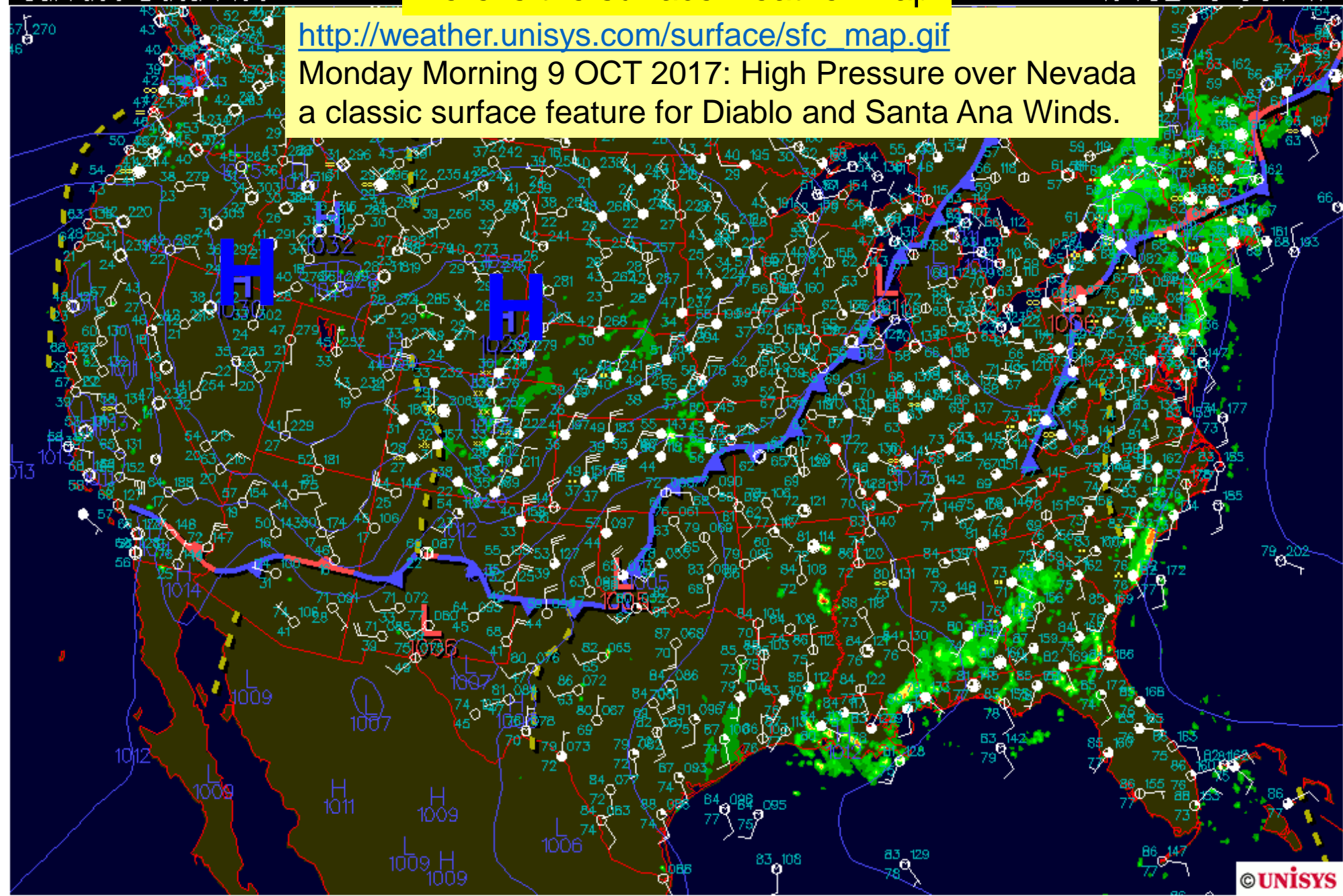
"By the time you get to this season, right when you're starting to anticipate... rain, it's actually the most fire prone part of the year," said Max Moritz, a wildfire specialist at the University of California Cooperative Extension.

...most destructive and largest fires in California...have occurred in...October.

...1991 Oakland hills fire that [destroyed 3,500 homes and killed 25 people](#) in Alameda County near San Francisco... the state's most destructive fire.

...the October 2003 Cedar fire in San Diego county [scorched 273,246 acres of land](#)— the most of any fire in the state's history.

[http://weather.unisys.com/surface/sfc\\_map.gif](http://weather.unisys.com/surface/sfc_map.gif)  
Monday Morning 9 OCT 2017: High Pressure over Nevada  
a classic surface feature for Diablo and Santa Ana Winds.

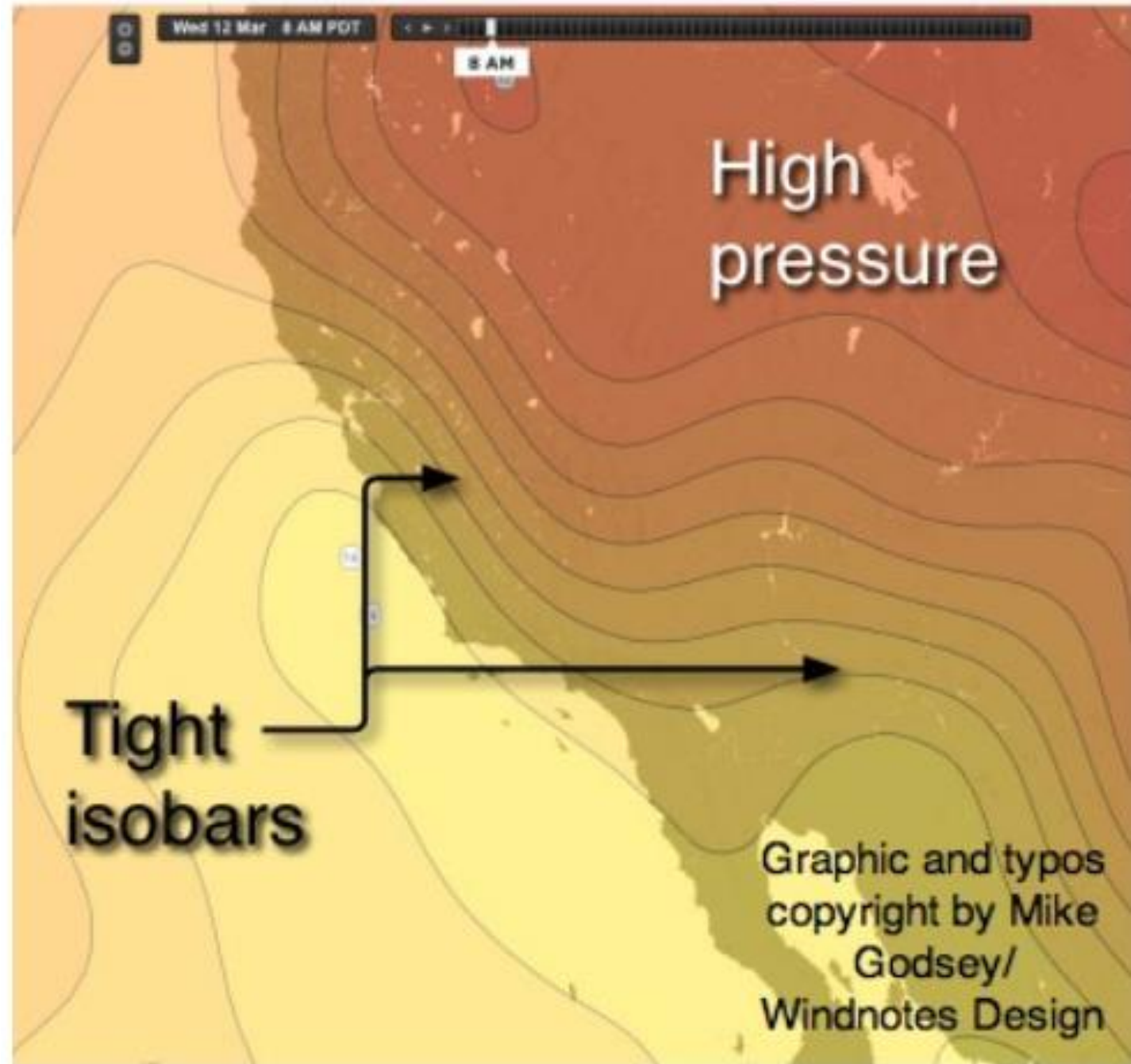


This graphic, and those which follow, show the “synoptic climatology” of the onset of the strong winds from the east, northeast and north when High Pressure sets into Nevada, every autumn.

The Pressure Gradient Force is from High pressure to Low pressure.

The Pressure Gradient Force is greater when the lines of equal pressure, “isobars,” get tightly packed.

This is the set-up for California’s fall season fires.



AARP implies that Diablo Winds are somehow an indicator of human-caused, CO2-fueled climate change, and these winds are getting worse.

I discuss this and other weather-related elements of the development of high pressure over Nevada in the fall, which happens every year, in the post:

<https://casf.me/weather-not-human-caused-co2-fueled-global-warming-is-responsible-for-2017s-damaging-wildfire-history-in-california-2/>

The Diablo Winds do not “spark wildfires” but the Diablo Winds fan the flames when humans commit arson, and when the high-pressure-induced winds blow PG&E’s high-tension lines into the trees which have been allowed to grow into previously trimmed power line corridors.

## CALIFORNIA FIRES

Hot, dry winds (known as **Santa Anas** in southern California and **Diablos** in northern California) often whip up roaring fires across the state. It usually begins due to winds circulating around a high-pressure area over Nevada or Utah.

### 1 HIGH WINDS

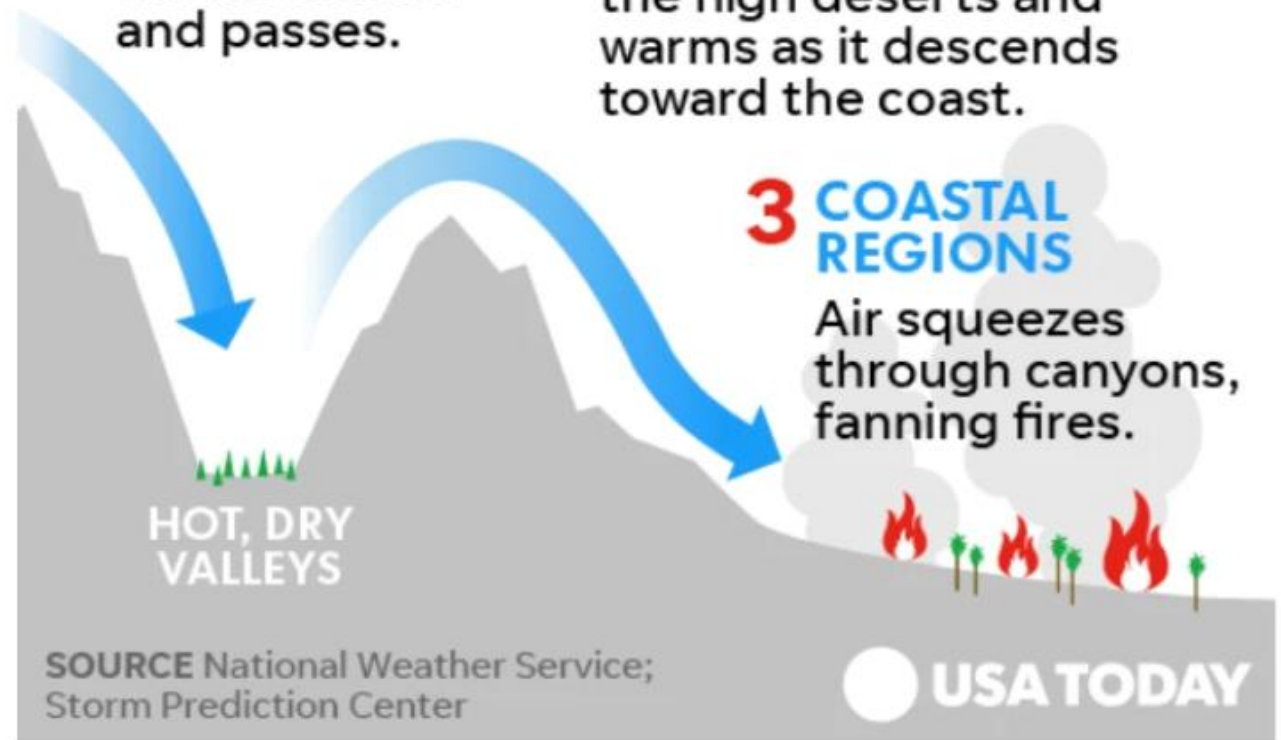
Winds can gust to **80 mph** in the mountains and passes.

### 2 COMPRESSED AIR

Cool air descends from the high deserts and warms as it descends toward the coast.

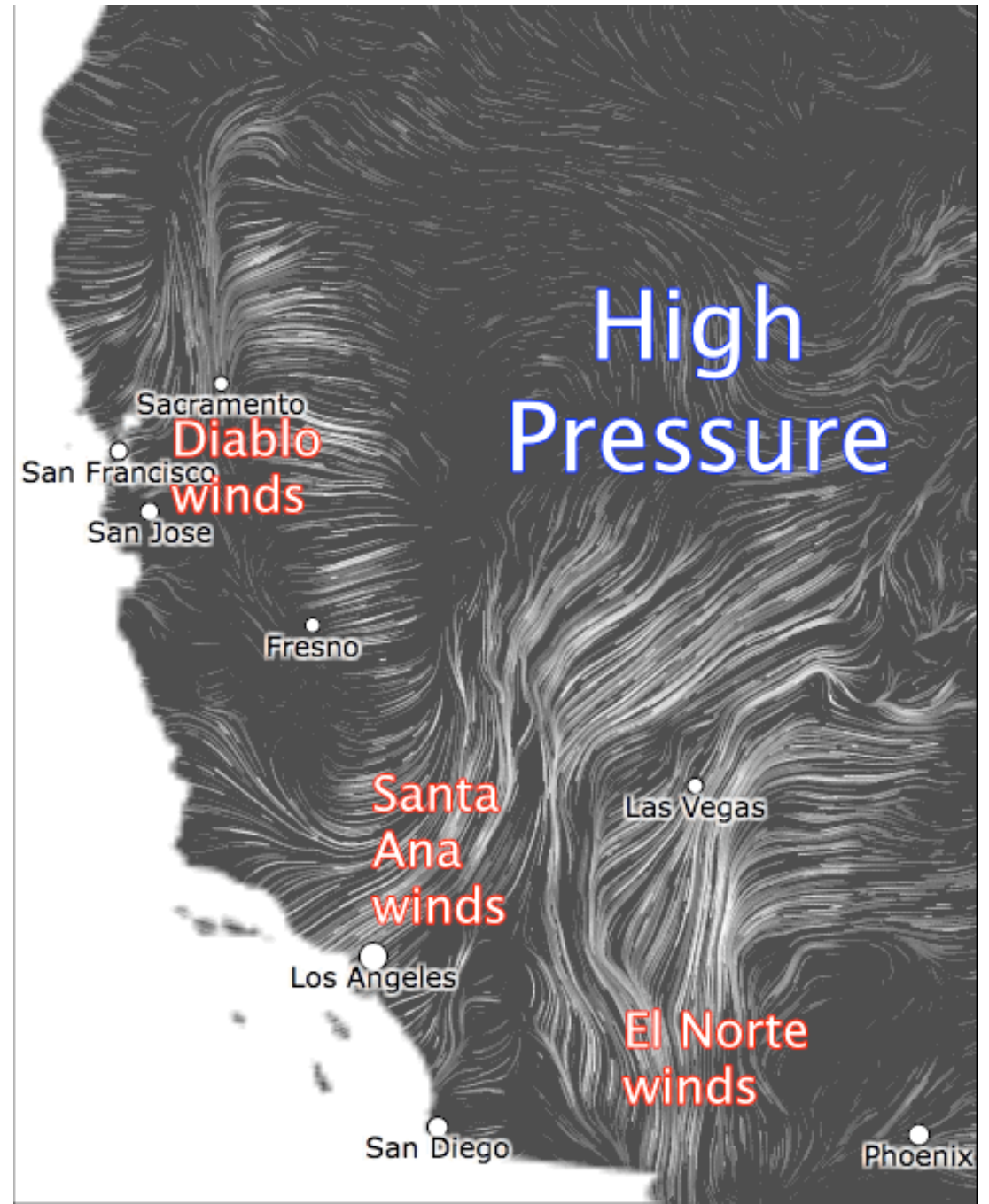
### 3 COASTAL REGIONS

Air squeezes through canyons, fanning fires.



This graphic is from the class I taught  
at OLLI-UTEP on 21 Oct 2017

An animated version of this graphic is available at:  
<https://blog.weatherflow.com/wp-content/uploads/2014/03/DiabloWindsANIM.gif>



# Record Heat/Drought & the U.S. "Dust Bowl"

1930-1941

Acres Burned, Orange

<https://climaterrealism.com/2021/05/national-fire-center-disappears-inconvenient-u-s-wildfire-data/>

Number of Fires and Acres Burned, United States, 1926-2020

Major Western U. S. Drought

1976-1978

No. of fires (Blue)

Super El Nino of 1982-83  
Western U.S. Very Wet

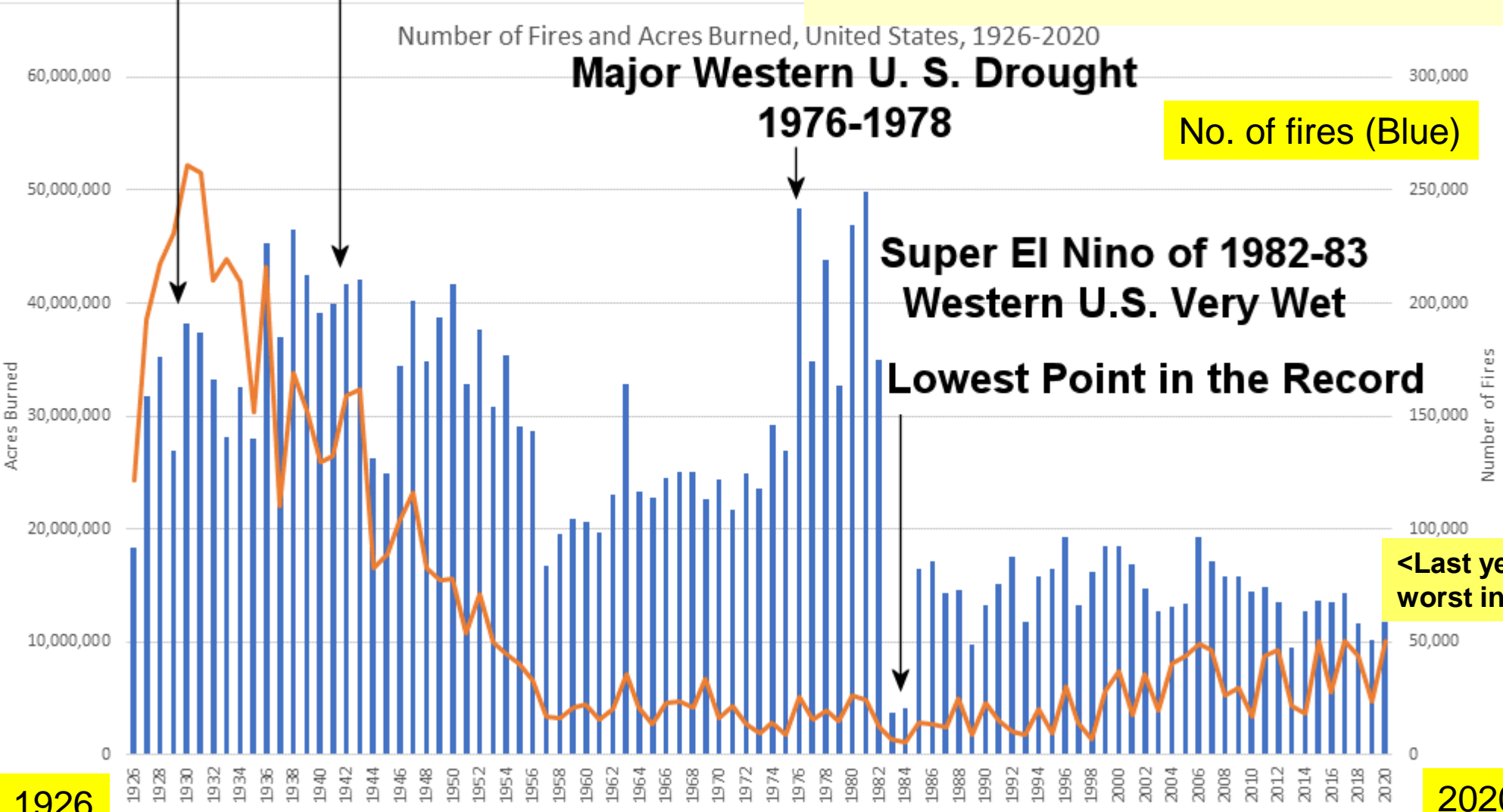
Lowest Point in the Record

<Last year's fires were worst in history>

1926

1983

2020



Axis Title  
Fires Acres

Source: National Interagency Fire Center  
[https://www.nifc.gov/fireInfo/fireInfo\\_stats\\_totalFires.html](https://www.nifc.gov/fireInfo/fireInfo_stats_totalFires.html)  
<https://www.nifc.gov/fire-information/statistics/wildfires>

**< AARP:> “Last year's fire season was the worst in California history.” “the California fires of 2020, with nearly 10,000 blazes that consumed more than 4.2 million acres of forest and killed 33 people.”**

Four most common ignition sources of large California wildfires since 1980 have been

**equipment, generating sparks** (chainsaws, grinders, mowers, etc.),  
**overhead power lines,**  
**arsonists,**  
**and lightning.**

**Bob's Analysis:** These are NOT CLIMATE CHANGE- related!

**Lightning occurs typically over the Sierra Nevada and the Northern tier of California's counties. Lightning outside these areas might be caused by weather systems, but not “climate change”**

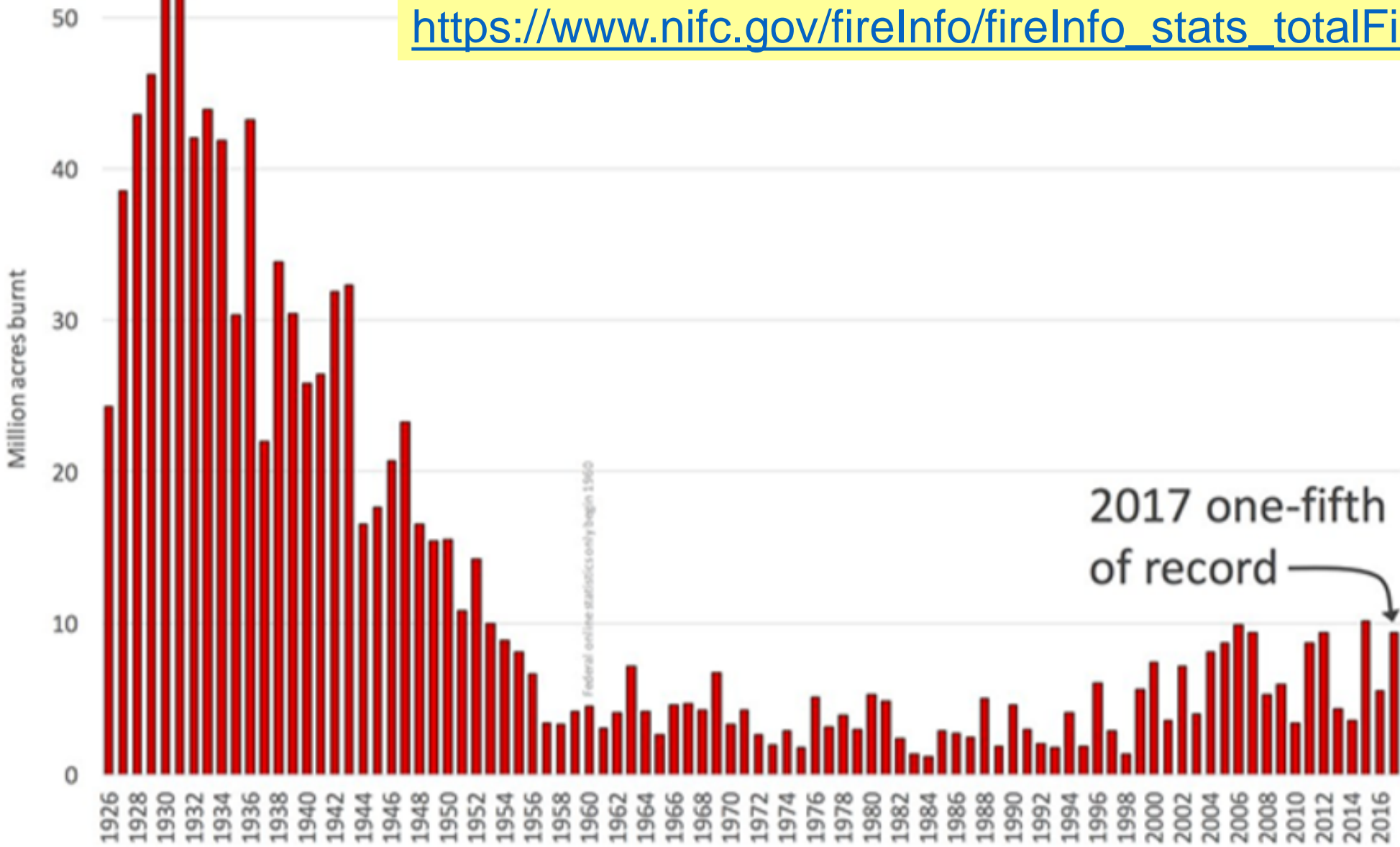
**AARP is deliberately blaming “climate change” for the 2020 fire season.**

**Region went into PDO-cold, a 30-year-long dry period ~1998-1999.**

**AARP is ignoring these human-caused change in the “fire potential” environment of California:**  
**Increased fuel loads by Spotted Owl Decision. Stopping tree-clearing of power line corridors**  
**More power lines into “Forest-Urban Interface. ” More people building houses there.**  
**Much of the power line infrastructure is poorly maintained.**  
**Arsonists.**

# US Forest Area Burned 1926-2017

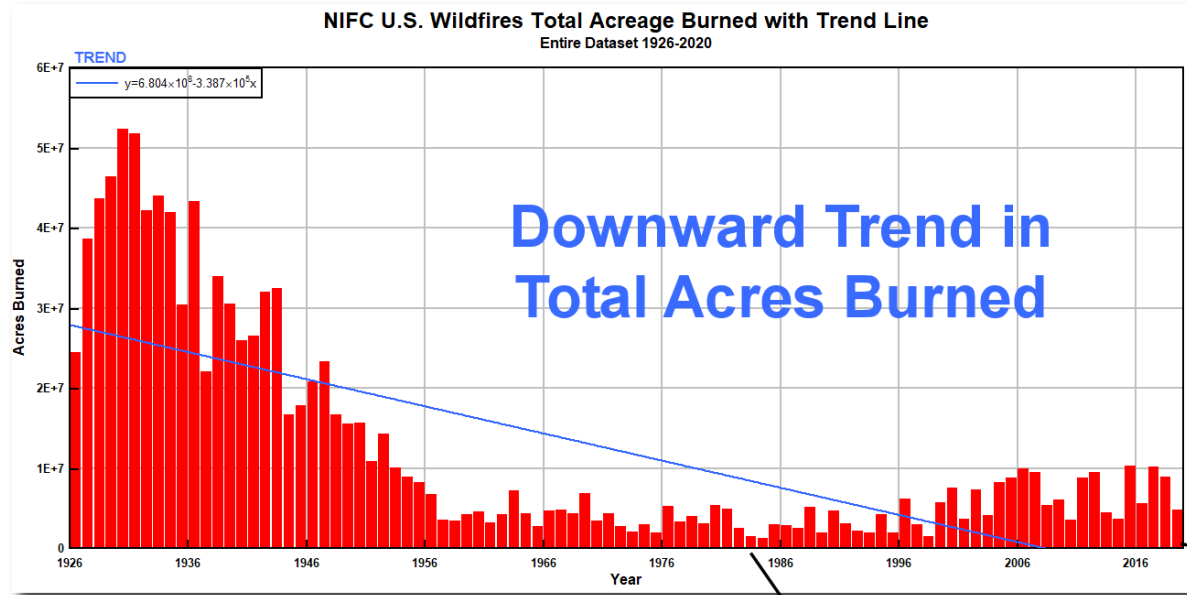
[https://www.nifc.gov/fireInfo/fireInfo\\_stats\\_totalFires.html](https://www.nifc.gov/fireInfo/fireInfo_stats_totalFires.html)



Sources: National Interagency Fire Center, data 1960-2016, [https://www.nifc.gov/fireInfo/fireInfo\\_stats\\_totalFires.html](https://www.nifc.gov/fireInfo/fireInfo_stats_totalFires.html), 2017 data until Oct 13, adjusted to similar fraction burnt area over past 9 years  
Historical Statistics of the United States - Colonial Times to 1970 Vol 1, Series L 48-55, 1926-70, perfect overlap for 1960-70. facebook.com/bjornlomborg



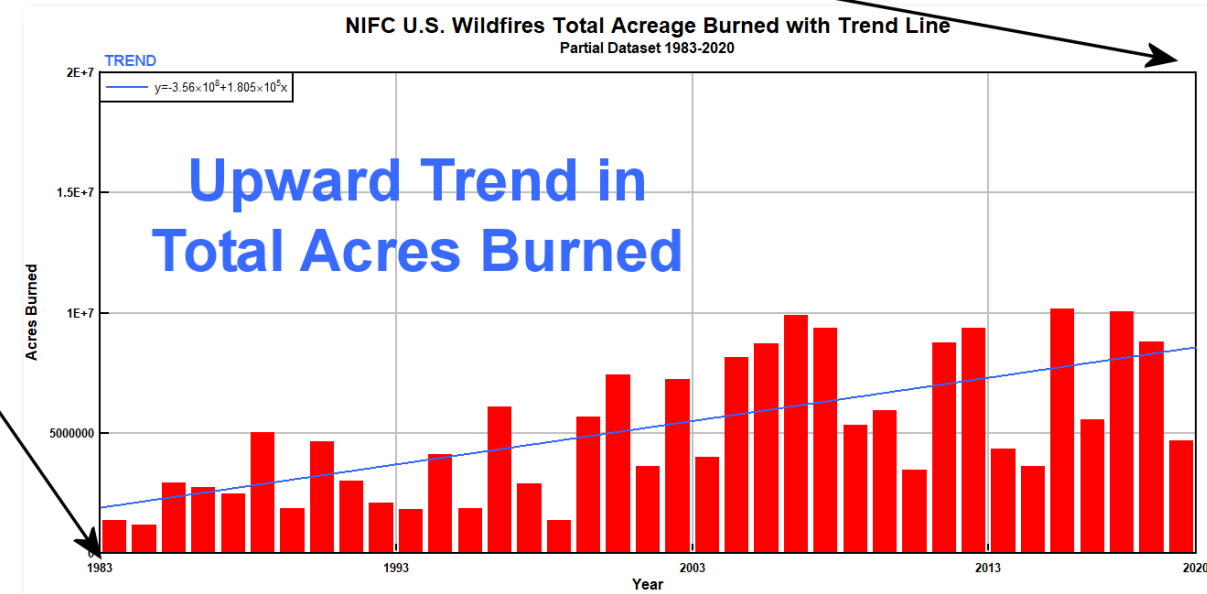
# ALL THE DATA 1926-2020



National Interagency Fire Center (NIFC) hides data prior to 1983 - turning a downward trend into an upwards trend

CHERRY PICKED DATA 1983-2020

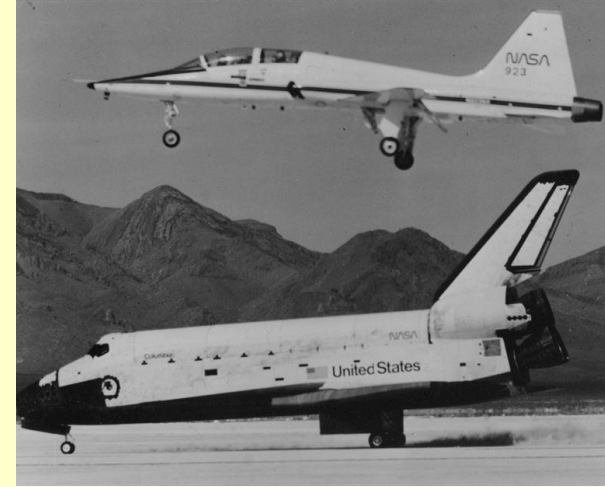
Next slides highlight the early 1980s



<https://climaterrealism.com/2021/05/national-fire-center-disappears-inconvenient-u-s-wildfire-data/>

Prominent weather events early 1980s were historic, especially in the Mountain West.

30 March 1982: Space Shuttle Columbia lands at Northrup Strip, White Sands Missile Range. Primary landing site, Edwards AFB, was flooded because of the PDO-warm pluvial (wet period) of the early 1980s.



May 1983: Interstate 15 north of Salt Lake City flooded because Great Salt Lake overflowed from heavy rain and snow runoff that winter and spring.



1983 was the peak of the PDO-warm phase of the late 20th century, and resulted in extremely wet conditions in the US Mountain West. The resulting peak runoff of 1983 severely affected the entire Colorado River Dam system. These images show how close the Glen Canyon Dam came to being catastrophically affected.

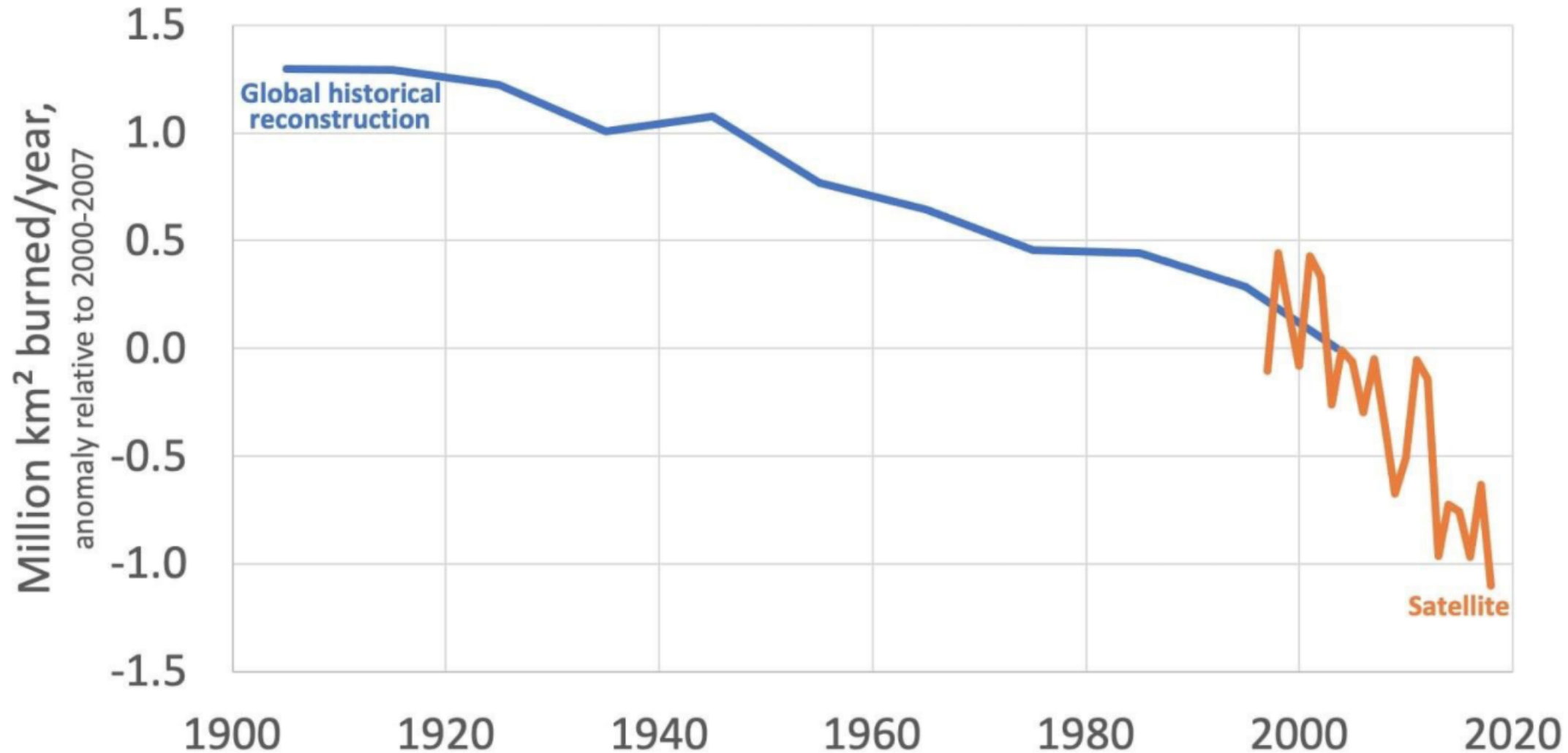


**Water got so high at Glen Canyon Dam plywood flashboard was improvised to prevent overtopping of the spillway gate.**

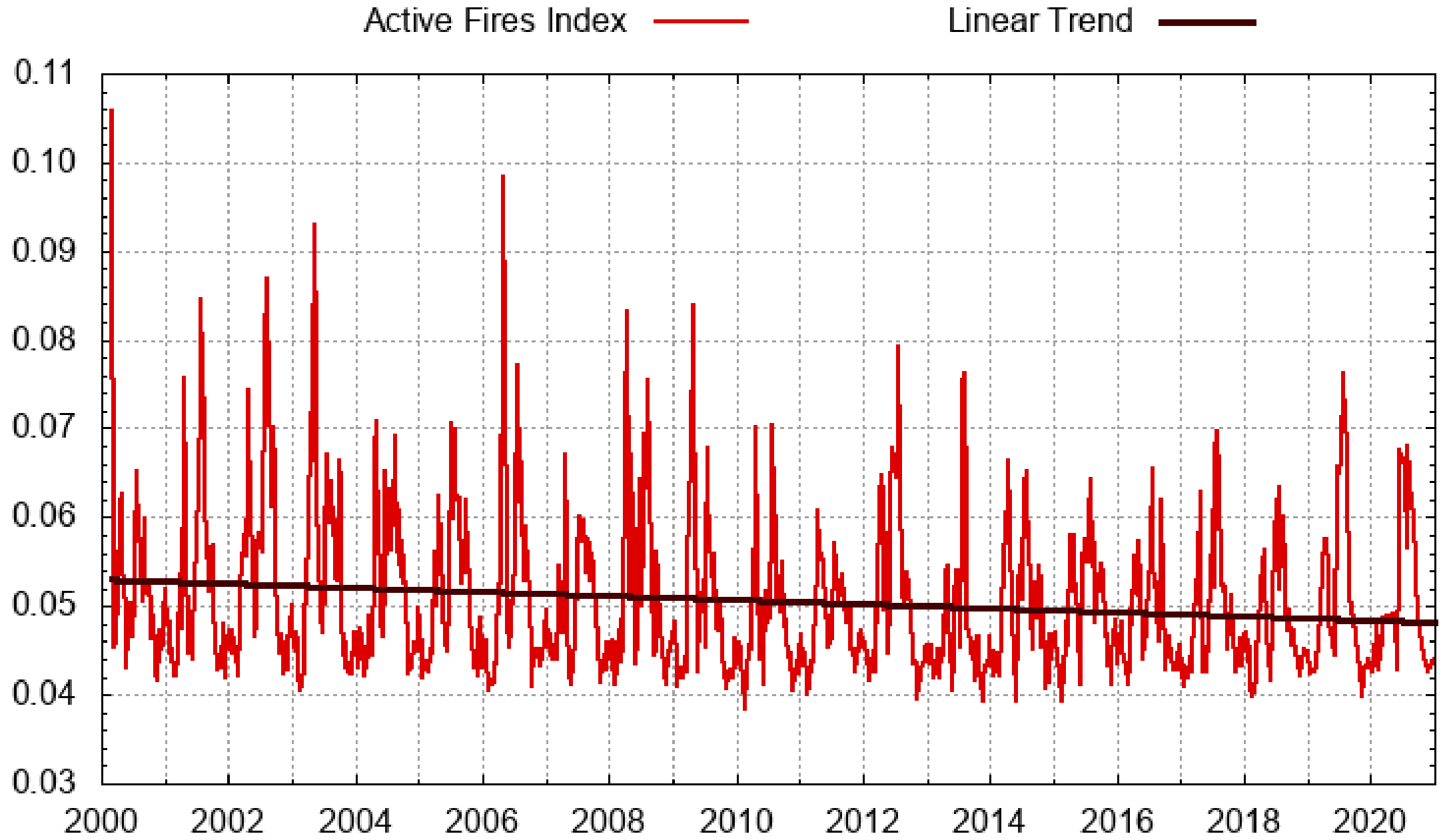
Left: [https://en.wikipedia.org/wiki/Risks\\_to\\_the\\_Glen\\_Canyon\\_Dam#/media/File:Glen\\_Canyon\\_Spillway\\_Gates.jpg](https://en.wikipedia.org/wiki/Risks_to_the_Glen_Canyon_Dam#/media/File:Glen_Canyon_Spillway_Gates.jpg)

Right: <http://geotripper.blogspot.com/2017/02/liveblogging-deluge-concerns-panic-at.html>

# Global Burned Area 1901-2018



1901-2007 from <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1002/2013JG002532>, 1997-2016 from <http://globalfiredata.org/analysis.html>, and 2017-18 from <https://gwis.jrc.ec.europa.eu/static/gwis.statistics.portal/countries-estimates/NA>. While estimates of global burned area attempt to be internally consistent, they differ in scope, hence data here shown as difference from 2000-7. Model estimate for that period is 3.63Mkm<sup>2</sup>, satellite estimate for period is 4.88Mkm<sup>2</sup>. [twitter.com/bjornlomborg](https://twitter.com/bjornlomborg)





# Climate Change Indicators

Climate Change Indicators

Greenhouse Gases

Weather and Climate

U.S. and Global Temperature

**High and Low Temperatures**

U.S. and Global Precipitation

Heavy Precipitation

Tropical Cyclone Activity

River Flooding

Drought

A Closer Look: Temperature and Drought in the Southwest

Oceans

Snow and Ice

Health and Society

Ecosystems

Frequent Questions

## Climate Change Indicators: High and Low Temperatures

This indicator describes trends in unusually hot and cold temperatures across the United States.

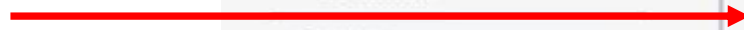
Figure 1. U.S. Annual Heat Wave Index, 1895–2015



<https://climaterrealism.com/wp-content/uploads/2021/05/EPA-heat-wave-old.jpg>

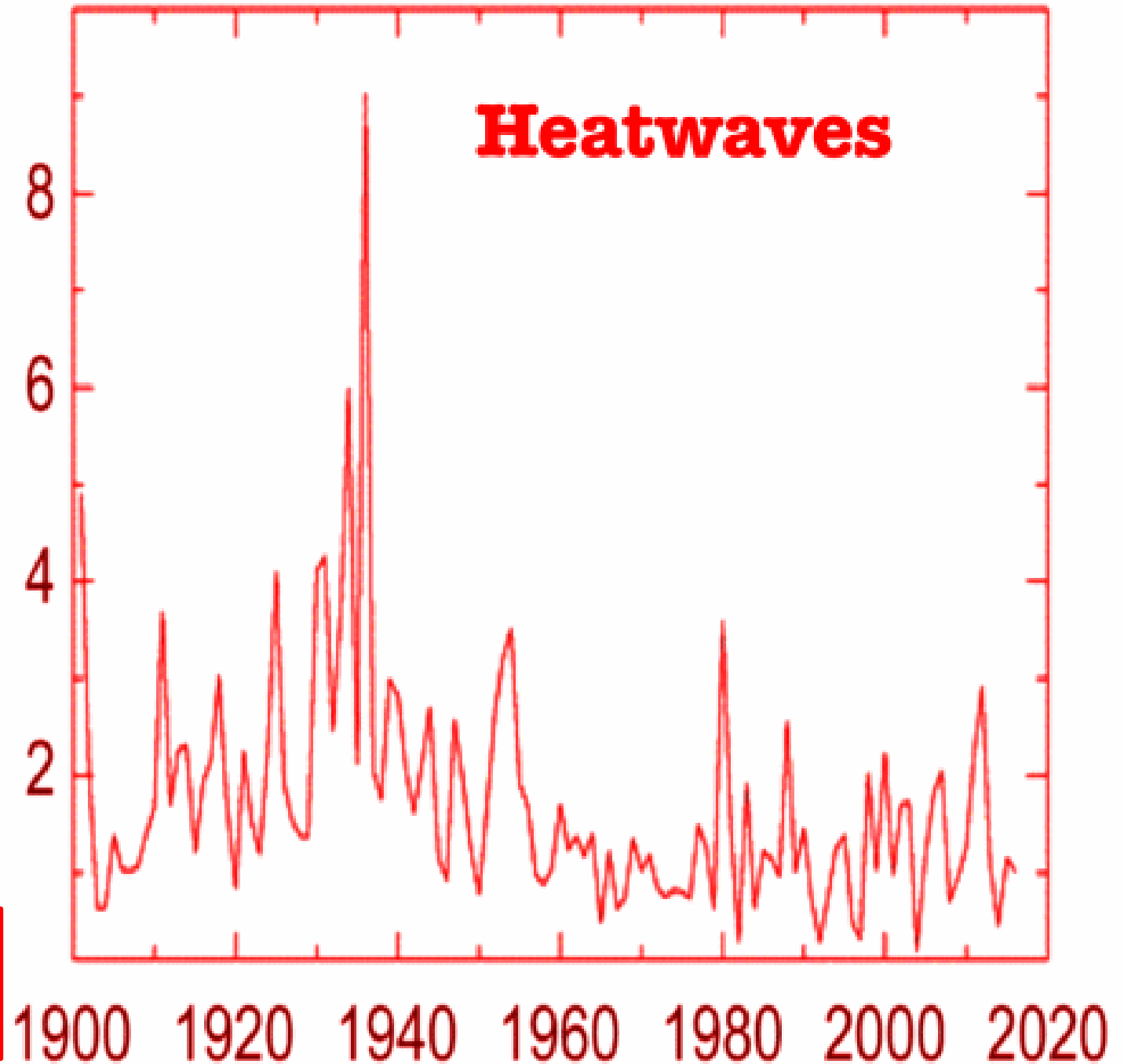
“Last year’s...” record-breaking heat wave...”

EPA’s Heat Wave Index (since de-emphasized, it is embarrassingly accurate)



<https://realclimatescience.com/2021/04/erasing-the-tropical-age/>

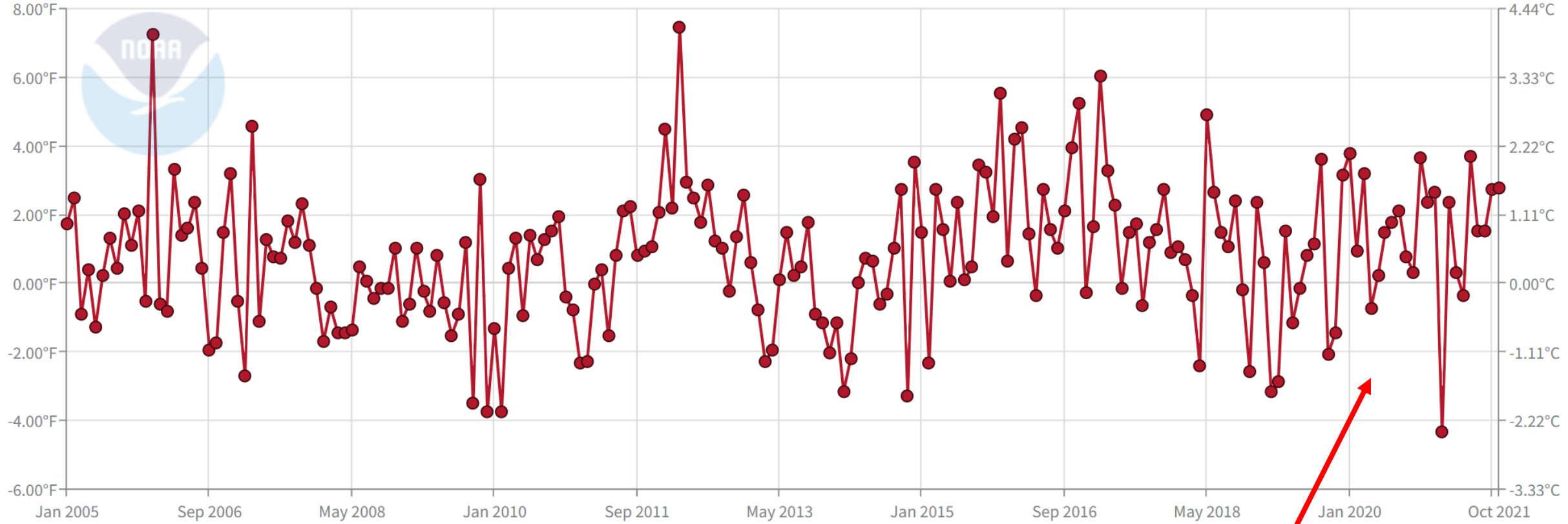
Heat Wave Magnitude  
Index daily



An animated version of this graphic is available at:  
[https://casf.me/wp-content/uploads/2022/01/  
Edit4-2022-1-4-Video-2021-12-30\\_14-08-37.mp4](https://casf.me/wp-content/uploads/2022/01/Edit4-2022-1-4-Video-2021-12-30_14-08-37.mp4)

# Average Temperature Anomaly, USCRN

□ ClimDiv ● USCRN ▲ USHCN



Jan 2005

Jan 2010

Jan 2015

Jan 2020

?

< “Last year’s”... “record-breaking heat wave...” >



Combination of Endangered Species Act and the National Environmental Policy Act shifted the environmental movement in the wrong direction.

### **Spotted Owl Decision** (added by Bob)

- Result: an **80 percent reduction in the number of trees that were harvested** and sold on public lands in California reducing number of operating sawmills there from 149 in 1981 to 27 in 2017.
- Bureaucratic oversight /permit requirements before logging could begin.
- Management moved from managers on the ground with local knowledge of the situation to bureaucrats in distant places who lacked it.
- **Preserving the environment was foremost, no matter how strong competing interests.**
- **Began restraint on cutting trees and clearing deadwood and underbrush. At no point was the process guided by insight “prophylactic measures today might prevent greater environmental destruction tomorrow.”**
- Preventing strategic burns that might protect vulnerable sites, environmental policies created a situation where **minor events**, such as a spark from a power line or a stray cigarette butt, **could cause disasters, large-scale loss of life and destruction of property, coupled with thick blankets of smoke that spread for miles.**



It is an odd way of calculating priorities.

California and the federal government take immense steps to stop, for example, tailpipe emissions, which at their worst did not cause a fraction of the pollution that the forest fires are now creating throughout the state.

AARP article implies 2020 was an extraordinarily high year for lightning activity in California.

Next page contains a result of Google Search for <lightning strike history in California>



lightning strike history in california



## People also ask

When did lightning strike in California?

How many lightning strikes does California have?

Last year, some 170 million lightning strikes occurred across the country, about 22% below average; California was 51% below average with 283,000 strikes, despite the deadly August 2020 surge.

Sep 24, 2021

What I mean by **weather event**, not climate change



**<AARP>** “Those are extreme weather events, but even the everyday has become more extreme.

Scientists have been measuring air temperature since the 1880s, and 2020 was Earth's second hottest of the past 140 years, according to the National Oceanic and Atmospheric Administration.

Moreover, 19 of the warmest years on record have occurred since 2000.

No matter what you may think about the causes, the climate is changing, and the repercussions of this are no longer some distant concern.

With rising temperatures and more violent weather come a host of issues that affect how older Americans live — from where we choose to reside and new health risks we face, to whether we can still pursue the lifestyles we've long hoped for.”

“the climate is changing...”

This is a particularly vapid statement, written like a News Flash.

There is NEVER a period of climate stasis.

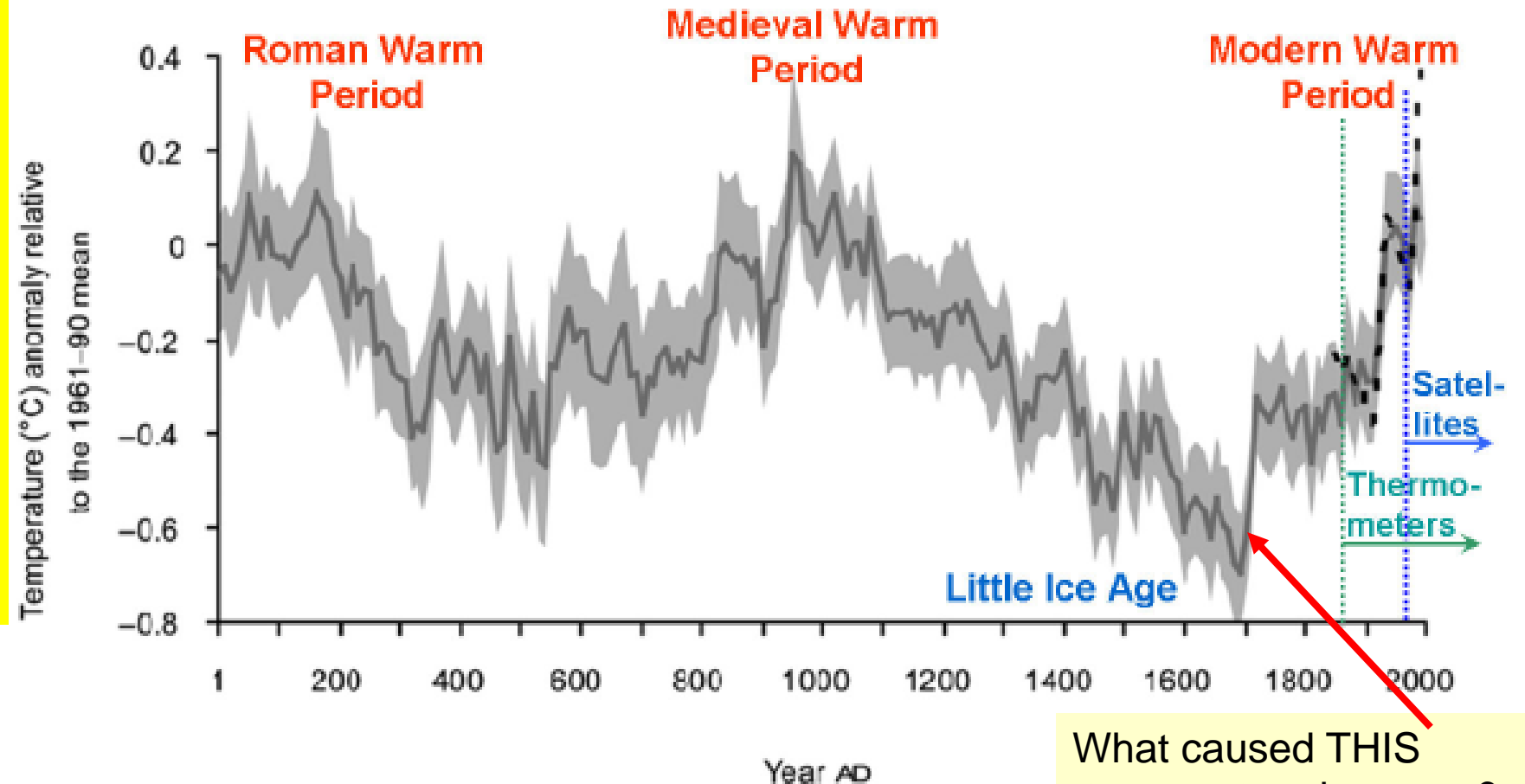
Temperatures NEVER flatline.

Climate is ALWAYS changing.

Right, a “multiproxy” temperature reconstruction of the past 2000 years.

Nowhere in the AARP article do they mention that today’s warming continues a pattern seen for over 2000 years.

### Temperature Reconstruction\* for N. Hemisphere, 1 - 2000 AD Shows Modern Warm Period Not Exceptional



\*Ljungqvist, F.C. 2010. A new reconstruction of temperature variability in the extra-tropical Northern Hemisphere during the last two millennia. *Geografiska Annaler: Physical Geography*, Vol. 92 A(3), pp. 339-351, September 2010. DOI: 10.1111/j.1468-0459.2010.00399.x

What caused THIS temperature increase?

What causes these 1000-year cycles?

“rising temperatures and more violent weather” ...simply NOT TRUE.

My class, “Atmospheric Motions” at Texas A&M, in 1964, contained basics of Atmospheric Fluid Dynamics:

Strength of “Mid-Latitude” storms, also “Extratropical Storms,” **depends on the temperature difference between the poles and tropics.**

Temperature difference also drives strength of **mesoscale systems** which bring tornadoes, and thunderstorms, which produce large hail, strong outflow winds.

Climate Alarmists frequently claim “Human-Caused, CO<sub>2</sub>-fueled Global Warming” is causing polar temperatures to rise at twice the rate of tropical temperatures.

This would reduce the pole to tropics temperature difference or temperature gradient.  
“Baroclinicity decreases.”

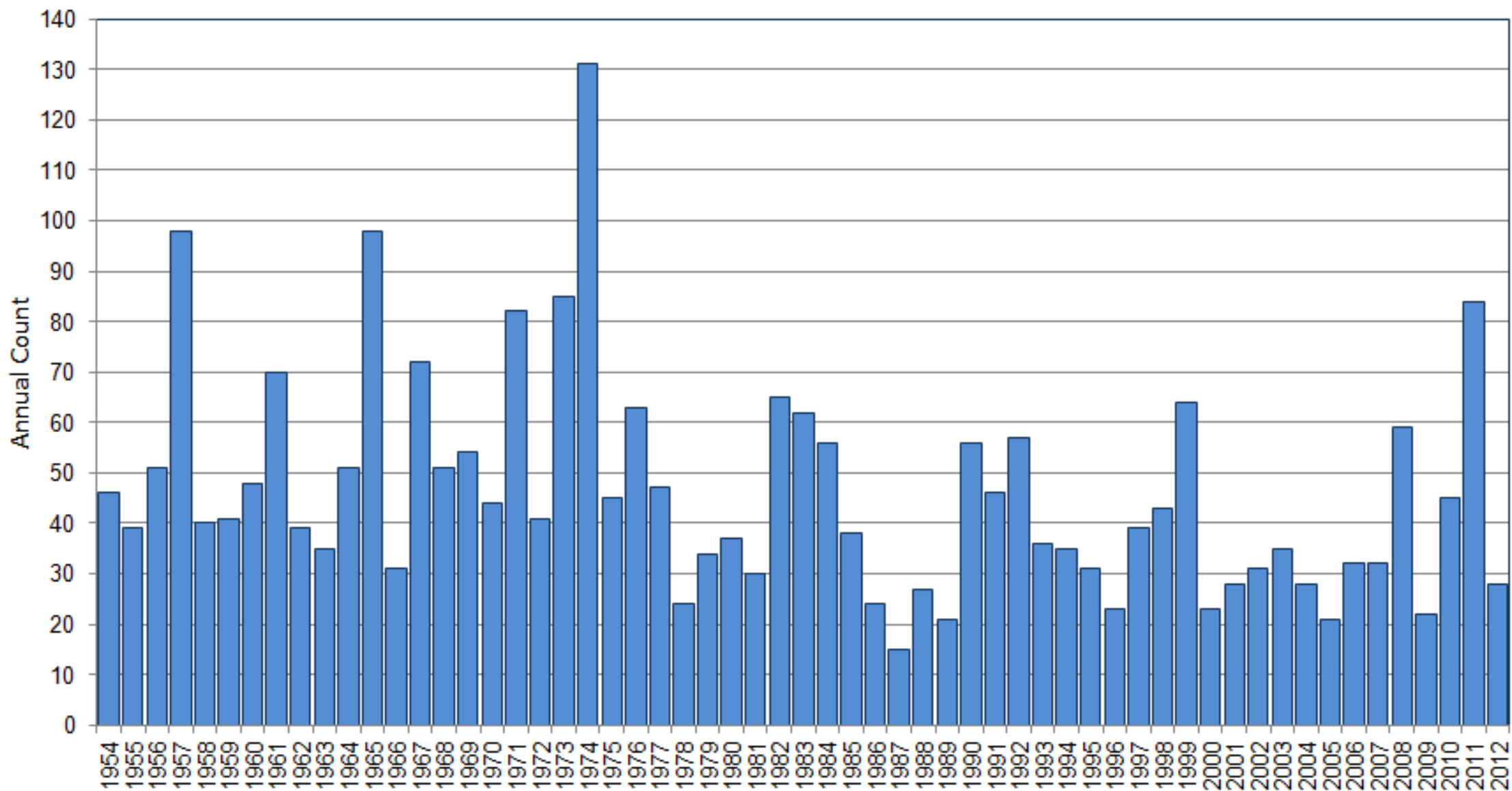
Following data show: as modest warming progressed, **severe, extreme tornado occurrences decreased.**

# Extreme Weather Events

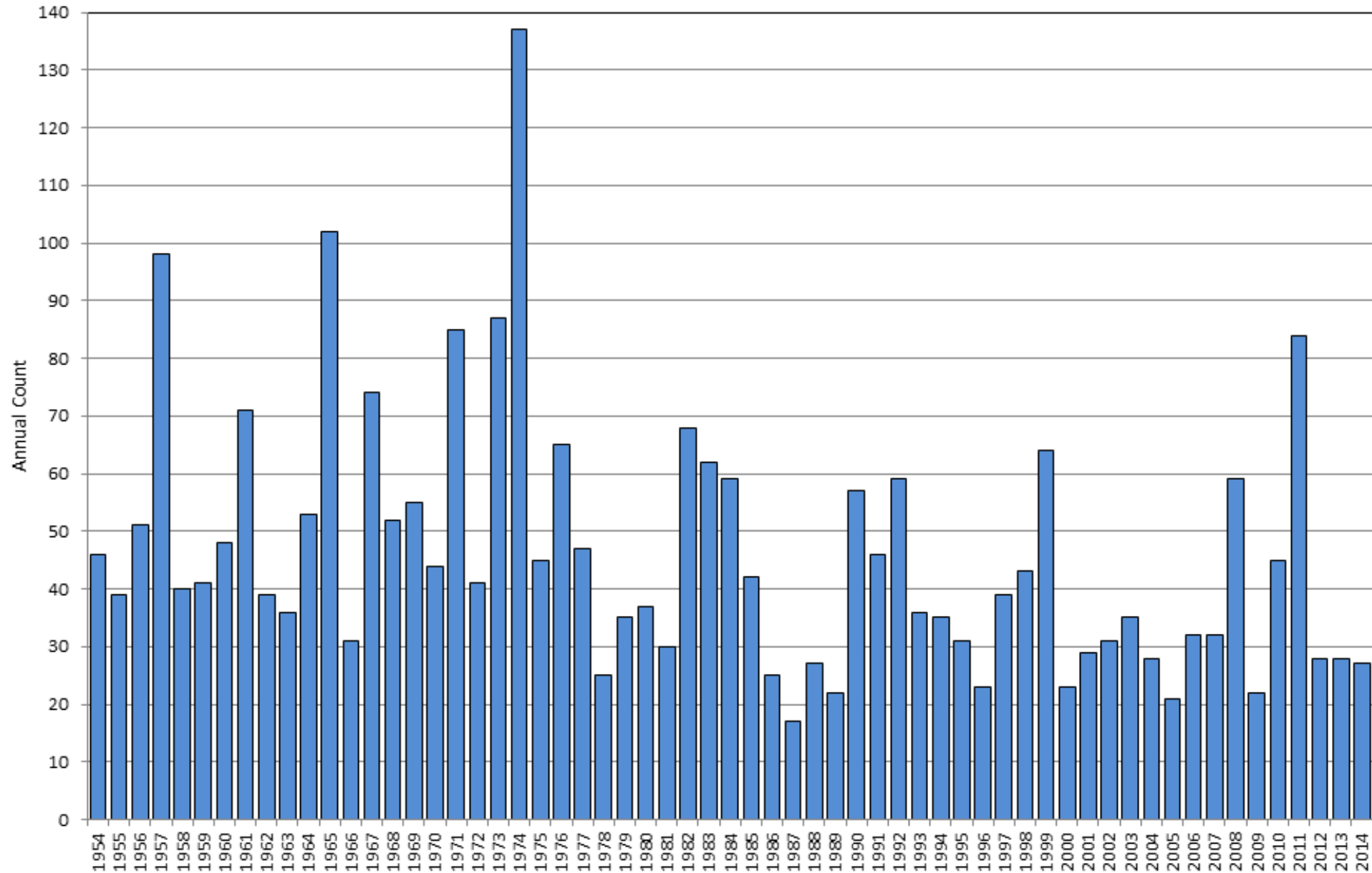
## Tornadoes



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



## U.S. Annual Count of Strong to Violent Tornadoes (F3+), 1954 through 2014



# U.S. Tornadoes

**NOAA stopped reporting on Tornadoes EF3 and higher; they now report 'all tornadoes.'**  
Technology and higher populations allow more weak tornadoes to be seen, reported

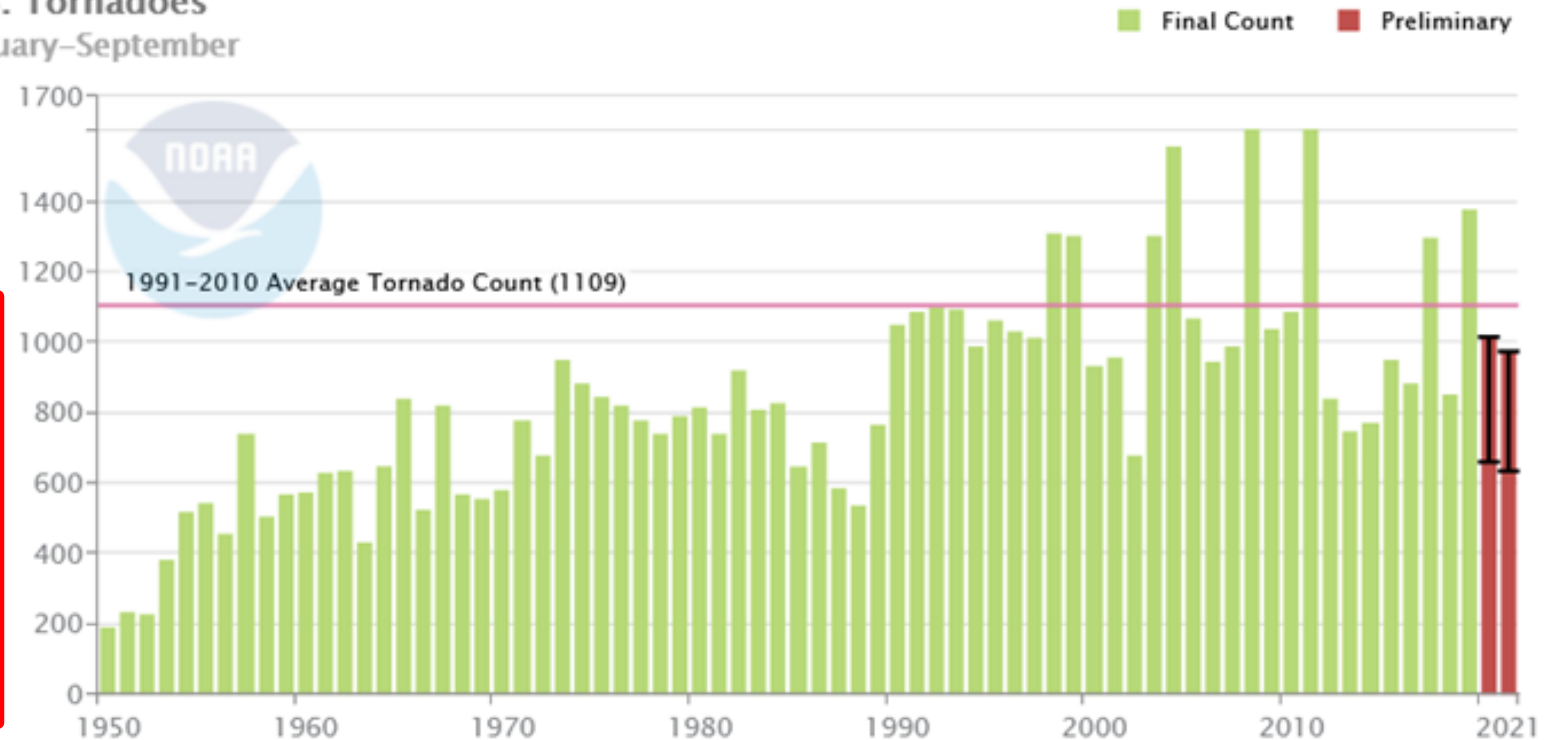
- Climate Monitoring
- State of the Climate
- Temp, Precip, and Drought
- Climate at a Glance
- Extremes
- Societal Impacts
- Snow and Ice
- Teleconnections
- Monitoring References

Tornado statistics for the Contiguous U.S. are provided by the [Storm Prediction Center \(SPC\)](#) and are available from 1950–2021. Additional information can be found in the [Monthly Tornado Report](#) and [Tornado Count Methodology](#).

Timescale:  Month:

Display Fatalities  Display 1991-2010 Average

U.S. Tornadoes  
January–September

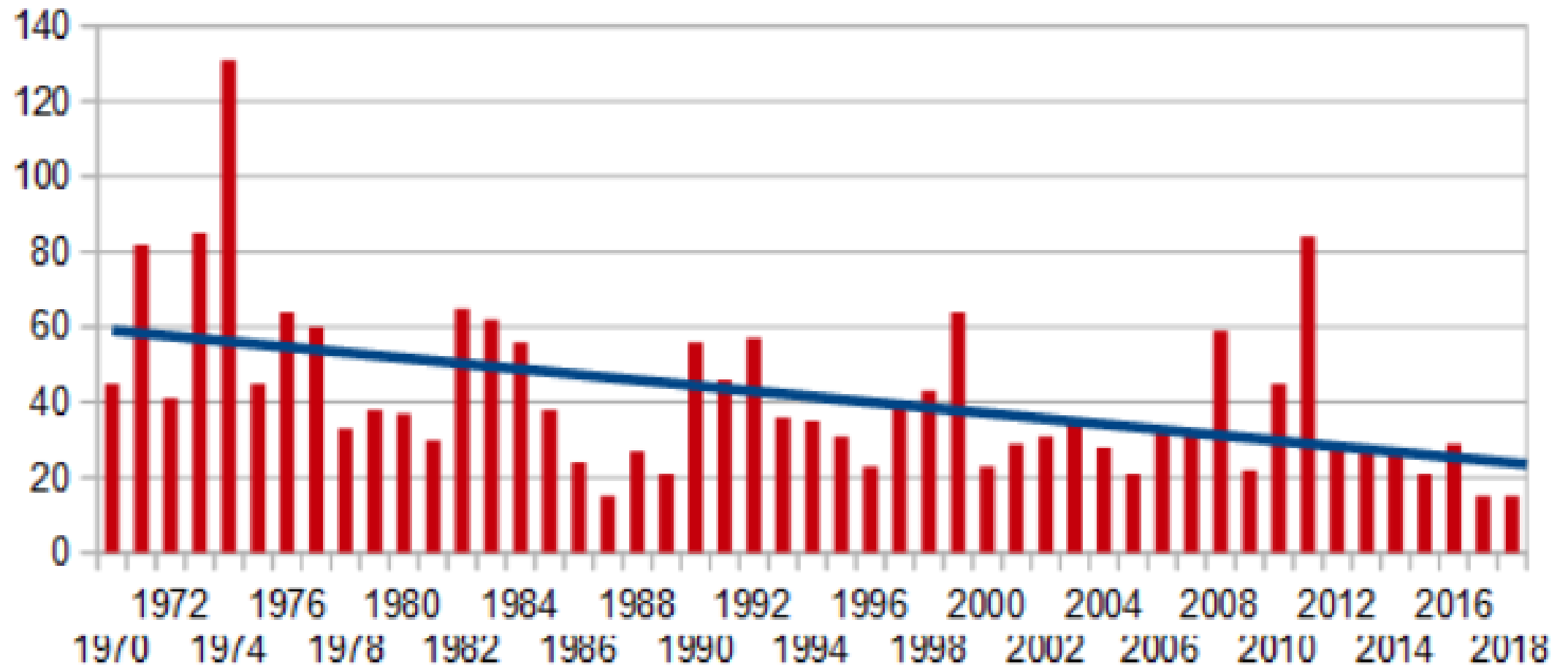


As a result, the decline in the numbers of severe and extreme tornadoes can not be easily seen.

NOAA, the AMS, and AARP are involved in deliberate deception.

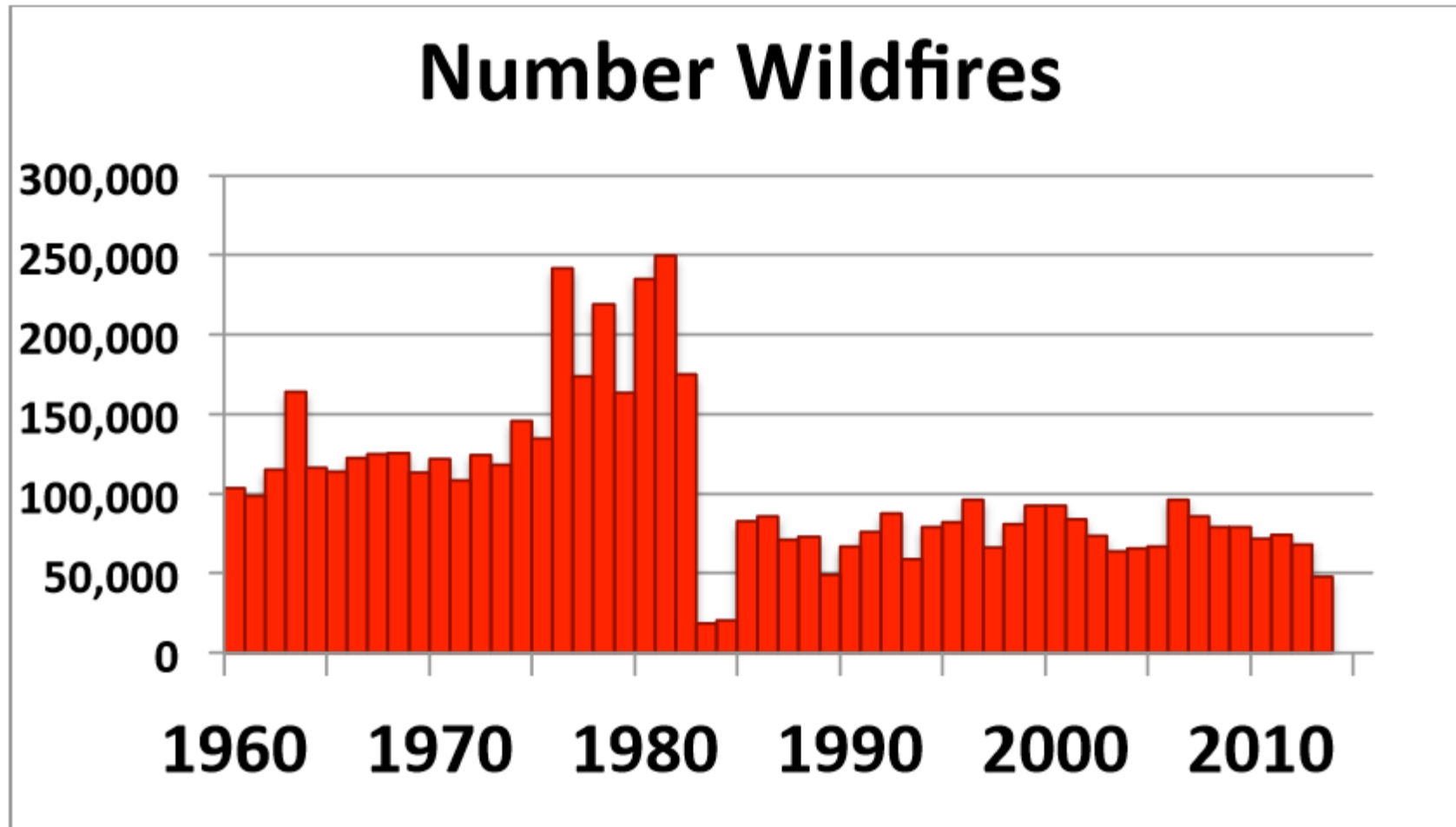
## Annual Count of US Tomadoes EF-3 and Stronger

1970 to 2018



# Extreme Weather Events

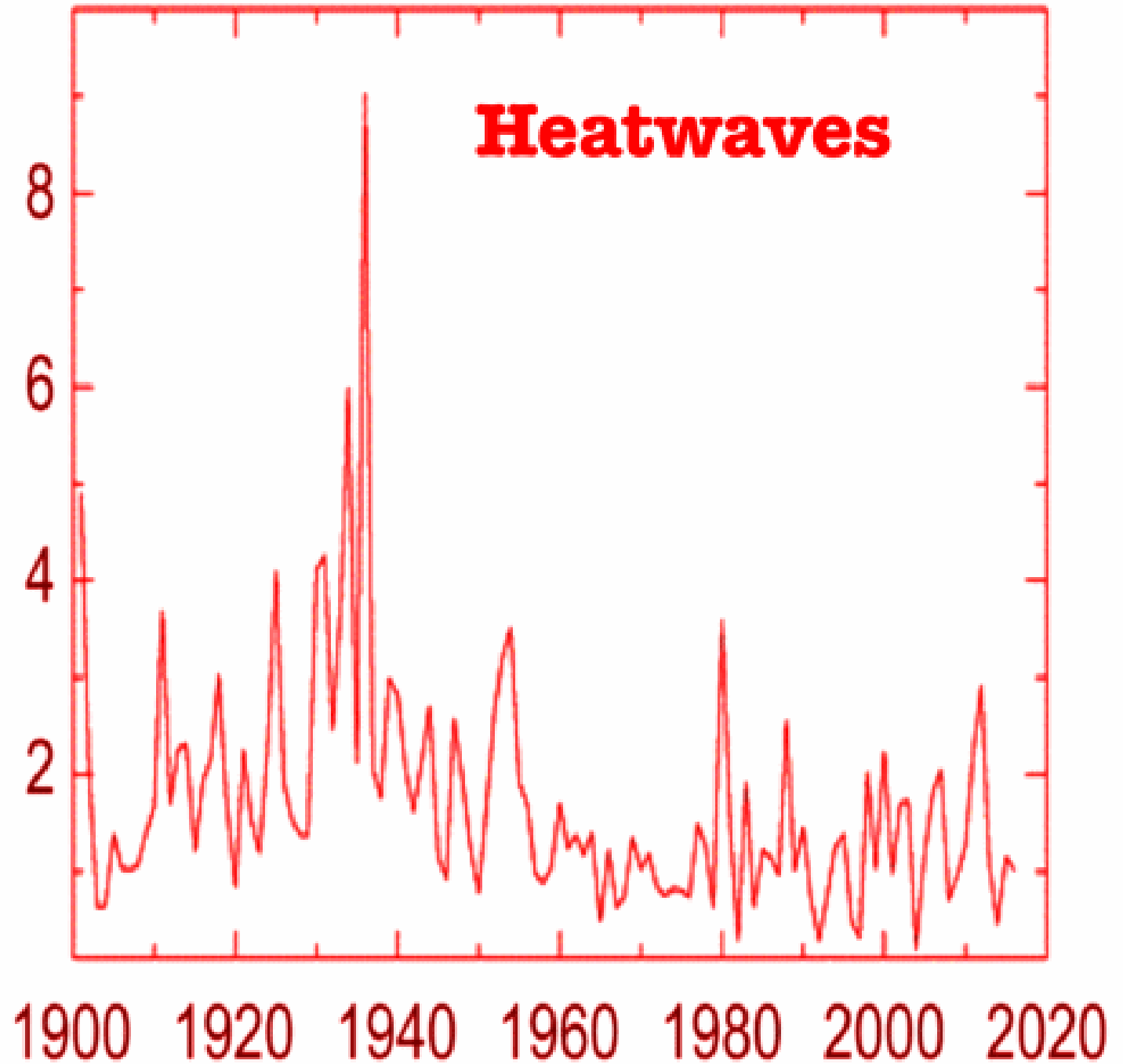
Large Fires



Above: Number of U.S. wildfires. As the management of these events changes, and thus the number also changes, but the number of events since 1985 has remained constant. (National Interagency Fire Center.)

<https://realclimatescience.com/2021/04/erasing-the-tropical-age/>

Heat Wave Magnitude  
Index daily



An animated version of this graphic is available at [https://casf.me/wp-content/uploads/2022/01/Edit4-2022-1-4-Video-2021-12-30\\_14-08-37.mp4](https://casf.me/wp-content/uploads/2022/01/Edit4-2022-1-4-Video-2021-12-30_14-08-37.mp4)



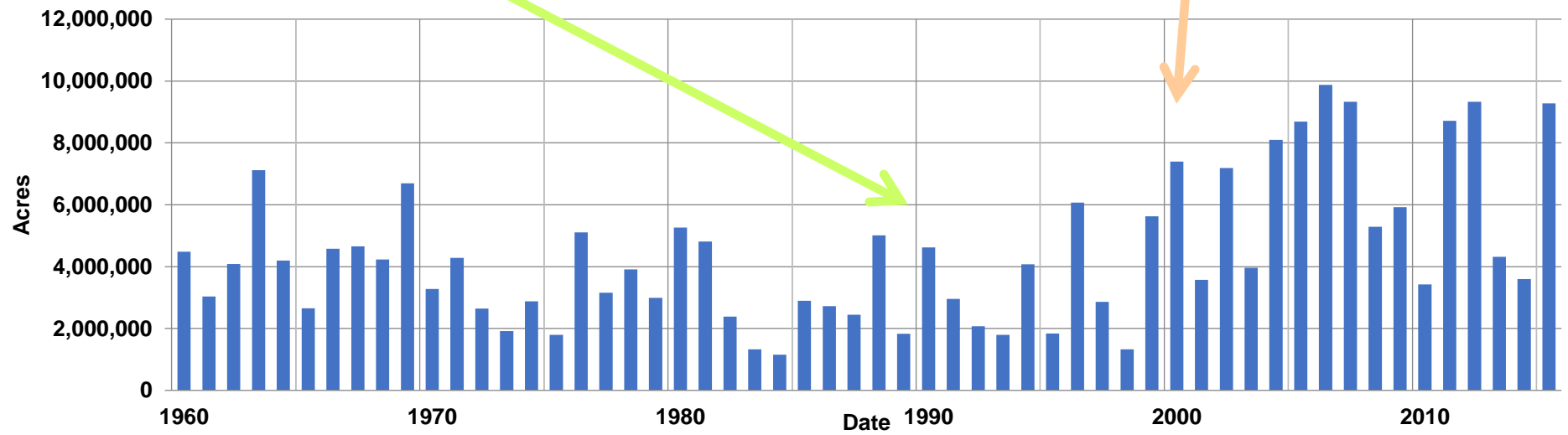
# NATIONAL INTERAGENCY **FIRE CENTER**

<https://www.nifc.gov/fireInfo/nfn.htm>

PDO Positive, more El Ninos  
more winter rains, fewer acres  
burn

PDO Negative, more La Ninas  
More droughty conditions, more acres burn,  
California to Florida and S Carolina

### Acres Burned





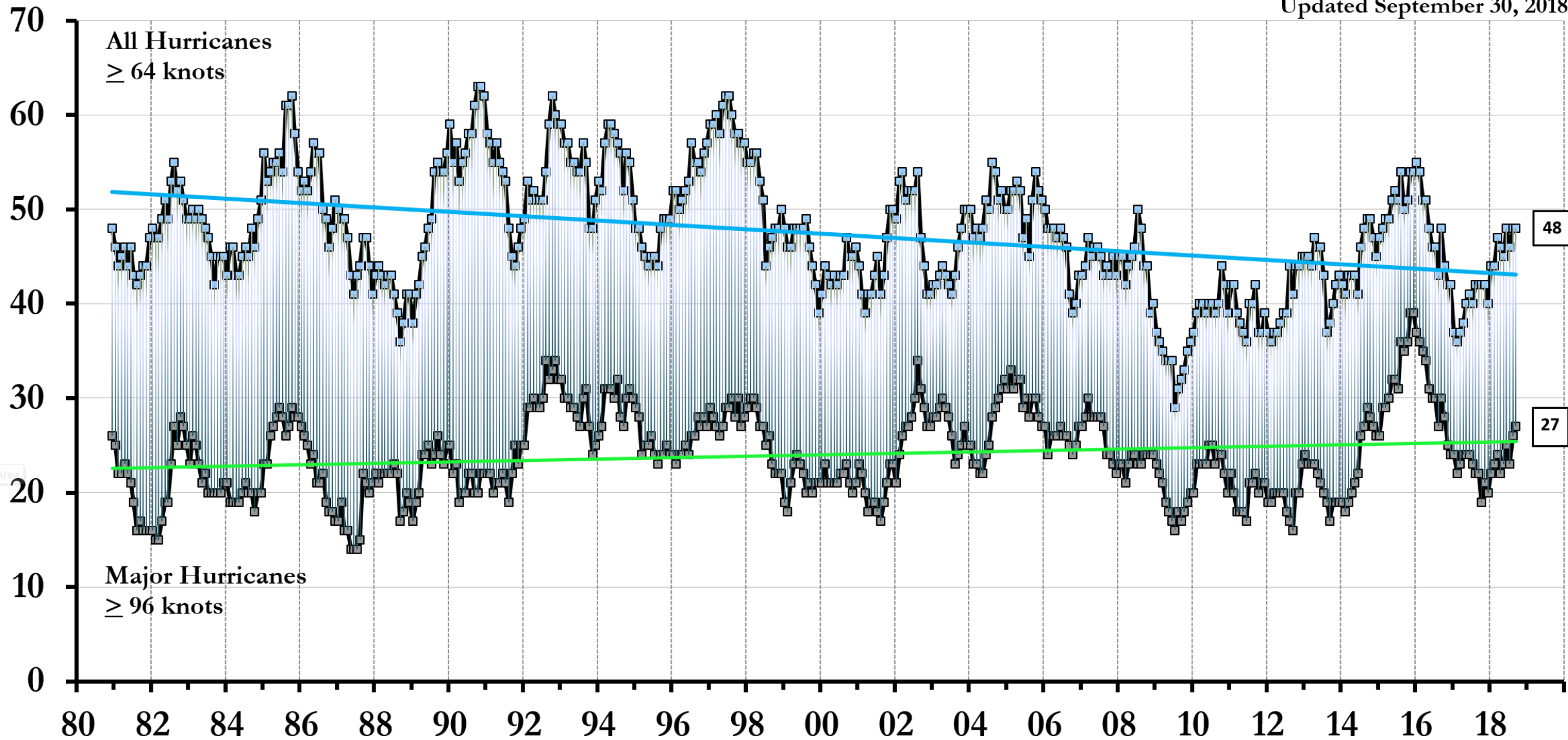
# Extreme Weather Events

## Hurricanes

# Global Major Hurricane Frequency -- 12 month running sums

Dr. Ryan N. Maue

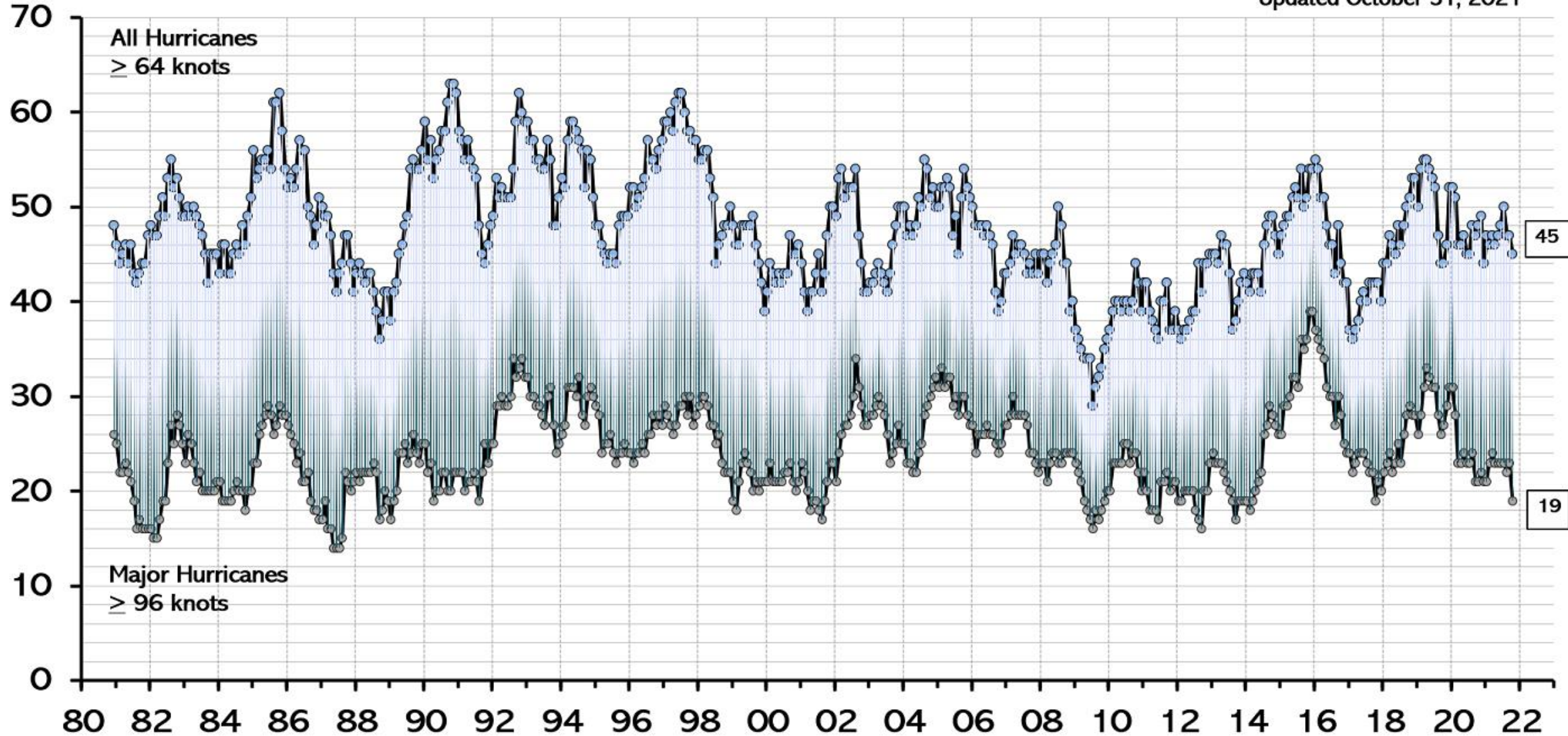
Updated September 30, 2018



# Global Major Hurricane Frequency – 12 month running sums

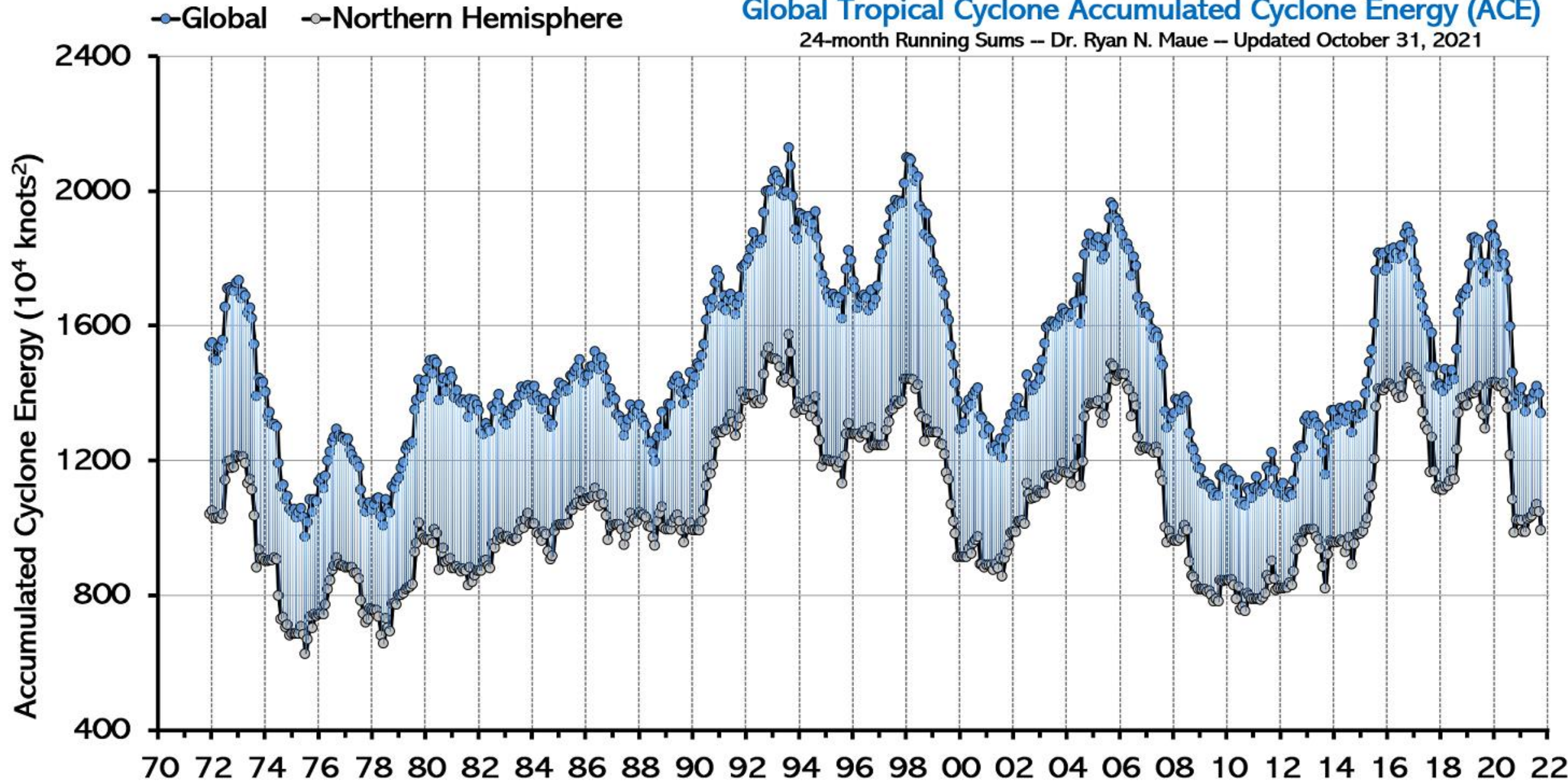
@RyanMaue

Updated October 31, 2021



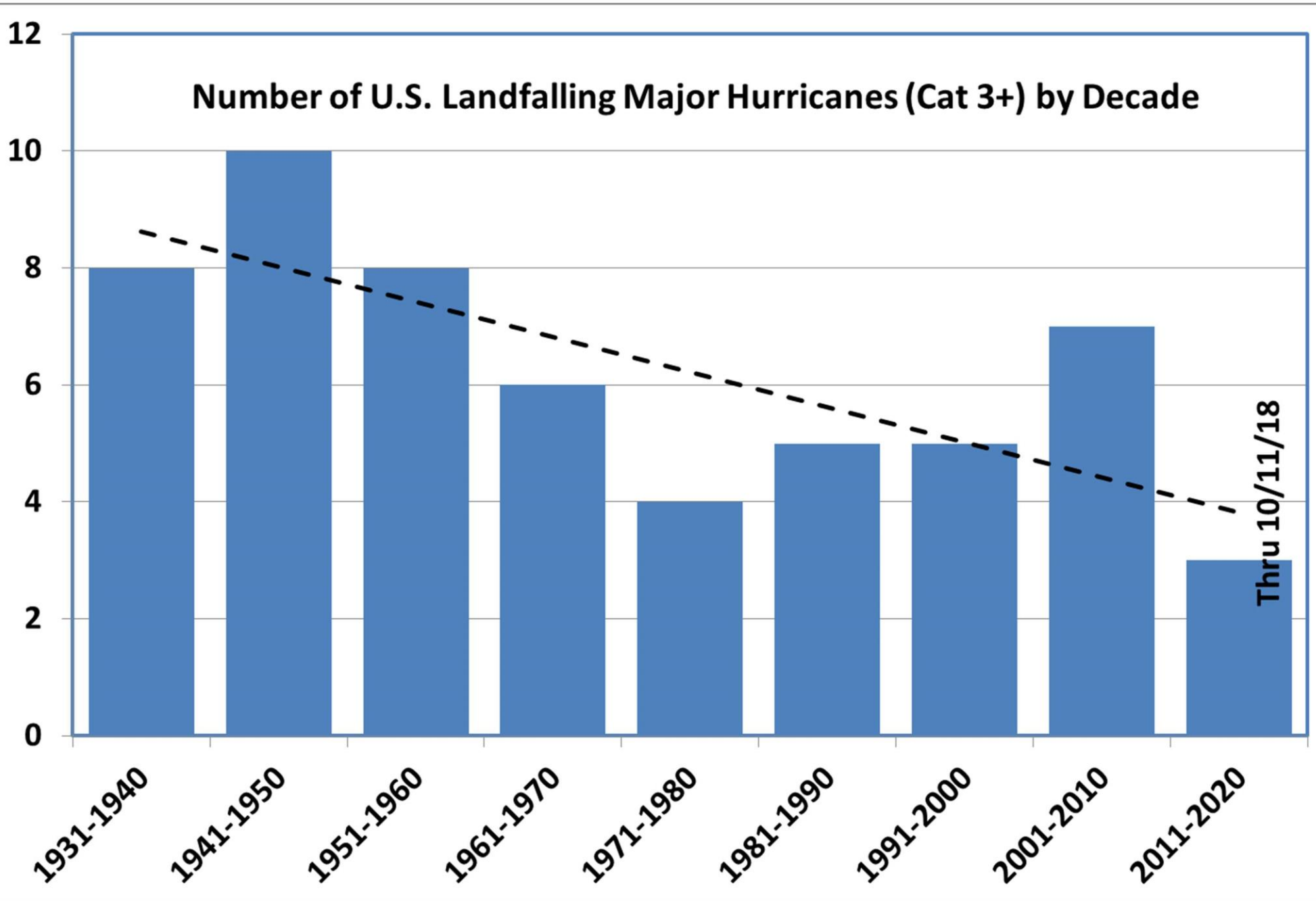
# Global Tropical Cyclone Accumulated Cyclone Energy (ACE)

24-month Running Sums – Dr. Ryan N. Maue – Updated October 31, 2021



Note: Global data completeness much lower in 1970s

Data: IBTrACS 4.0 (JTWC+NHC+Neumann) + operational ATCF b-decks



## Your finances

**Risk:** Greater storm risk

**Impact:** Rising home insurance rates

Someone has to pay for the devastation of the freezes, floods, hurricanes and fires that increasingly lead the news, and we the people will likely foot that bill through higher insurance outlays. Annual rates are soaring on [homeowners policies](#) in storm-ravaged Louisiana and Florida, where premiums are now more than \$3,000 a year, even with relatively low rebuilding costs, according to the Insurance Information Institute. Some California residents saw their fire insurance jump 300 percent in 2019 after big burns there.

But another factor in rate increases is uncertainty. "If insurance companies fear that the worst-case scenarios might get even worse, they will have to prepare for that, requiring higher premiums," says Robert Erhardt, who researches environmental and climate statistics at Wake Forest University. For instance, a storm delivering 40 inches of rain over four days in Texas was nearly unfathomable — until Hurricane Harvey in 2017. After that, actuaries recalculated the odds to 18 percent for a similar or bigger storm by the end of the 21st century because of climate change. That means higher bills.

AARP: "For instance, a storm delivering 40 inches of rain over four days in Texas was nearly unfathomable — until Hurricane Harvey in 2017."

UNFATHOMABLE in 2017?

40 inches of rain in 4 days is unfathomable when 42 inches fell in 24 hours in 1979?

<https://www.ncdc.noaa.gov/extremes/scec/records>

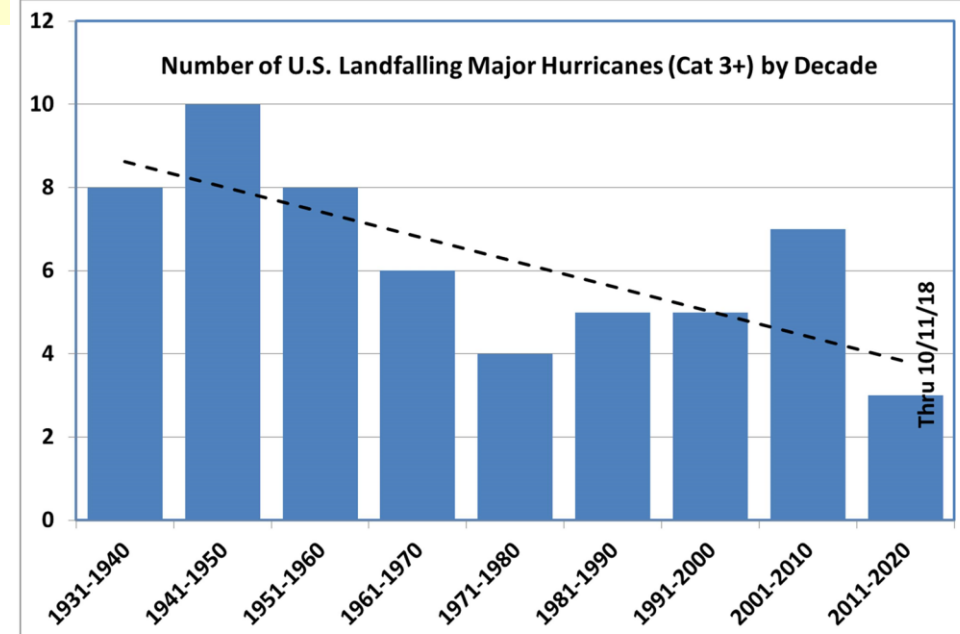
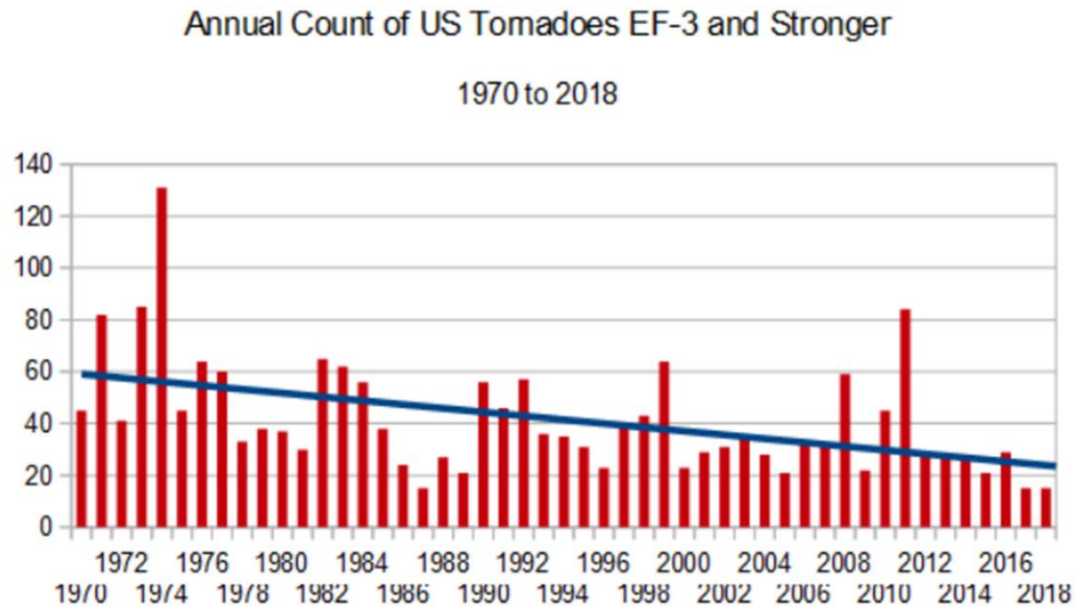
Texas	Maximum Temperature	120°F	Aug 12, 1936	Seymour	418221
			June 28, 1994	Monahans	415999
Texas	Minimum Temperature ⓘ	-23°F	Feb 12, 1899	Tulia 6NE	419176
			Feb 8, 1933	Seminole	418201
Texas	24-Hour Precipitation ⓘ	42 in.	<u>July 25 - 26, 1979</u>	Alvin	
Texas	24-Hour Snowfall ⓘ	26 in.	Dec 20 - 21, 1929	Hillsboro	414182

AARP is making the case that the insurance companies need higher insurance rates, when the data show that this much rain occurred near Houston in 1979, in only one day, not four!

From the previous, “that means higher (insurance rates and) bills.”

But wait a minute. As the modest warming continues, the equator to pole temperature difference decreases.

The “baroclinicity decreases.”



Shouldn't the rates *go down*?

Is AARP helping the insurance companies keep rates high at the expense of their customers?



**Risk:** Chaotic farming conditions

**Impact:** More expensive groceries

Think you spend a lot at the supermarket?

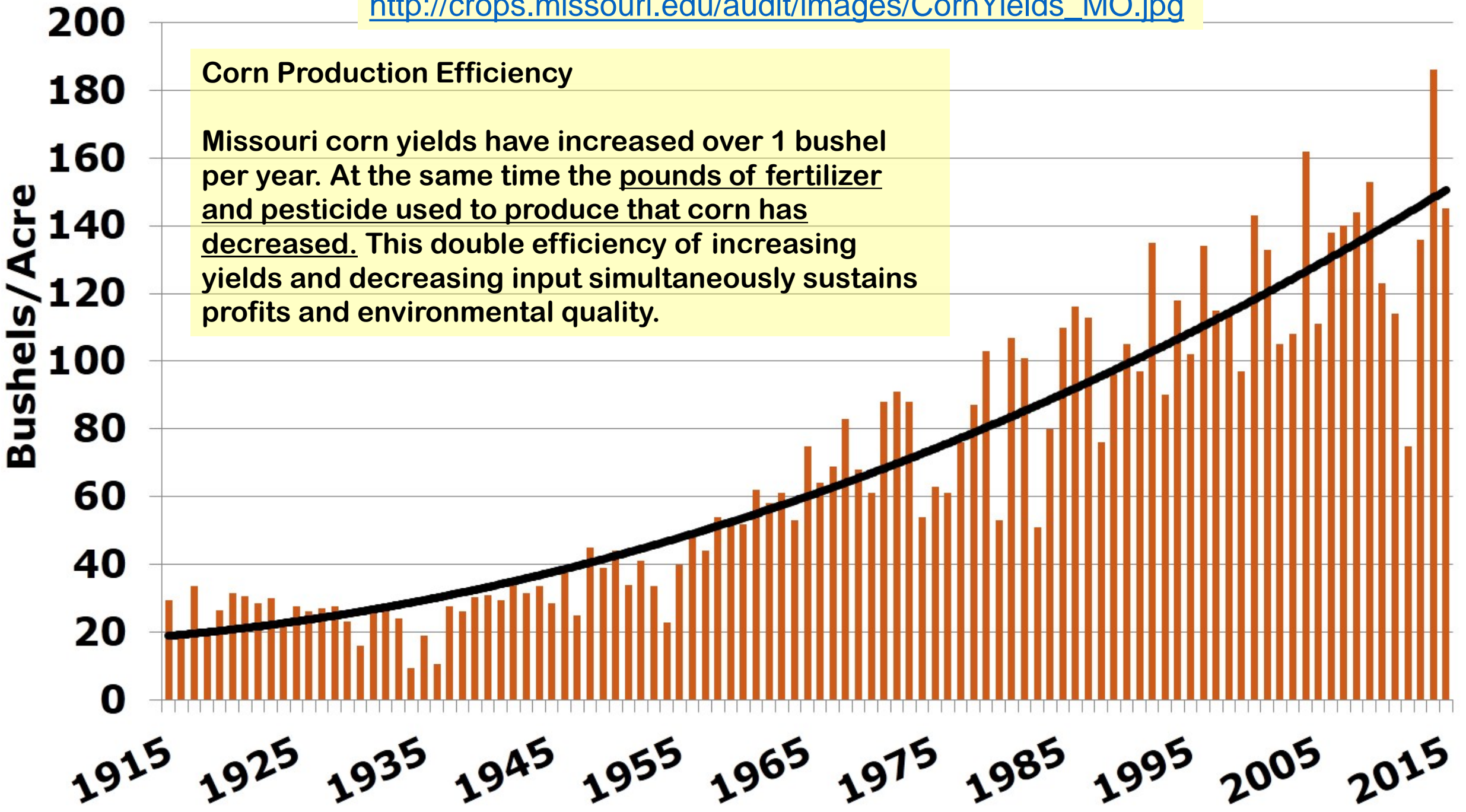
AARP published this in June 2021, before the rise in fuel prices caused by Biden's cancellation of the Keystone XL Pipeline and cancellation of drilling leases on Federal land took full effect. All prices now going up. Dec 2021: inflation is at a 39-year high.

Answers to the notion that chaotic farming conditions are leading to poor harvests and rising prices come from this post on the CASF web site, under **New Visitors**

[https://casf.me/wp-content/uploads/2019/04/Crop\\_Yields\\_Increasing\\_20\\_Apr\\_2019.pdf](https://casf.me/wp-content/uploads/2019/04/Crop_Yields_Increasing_20_Apr_2019.pdf)

**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.



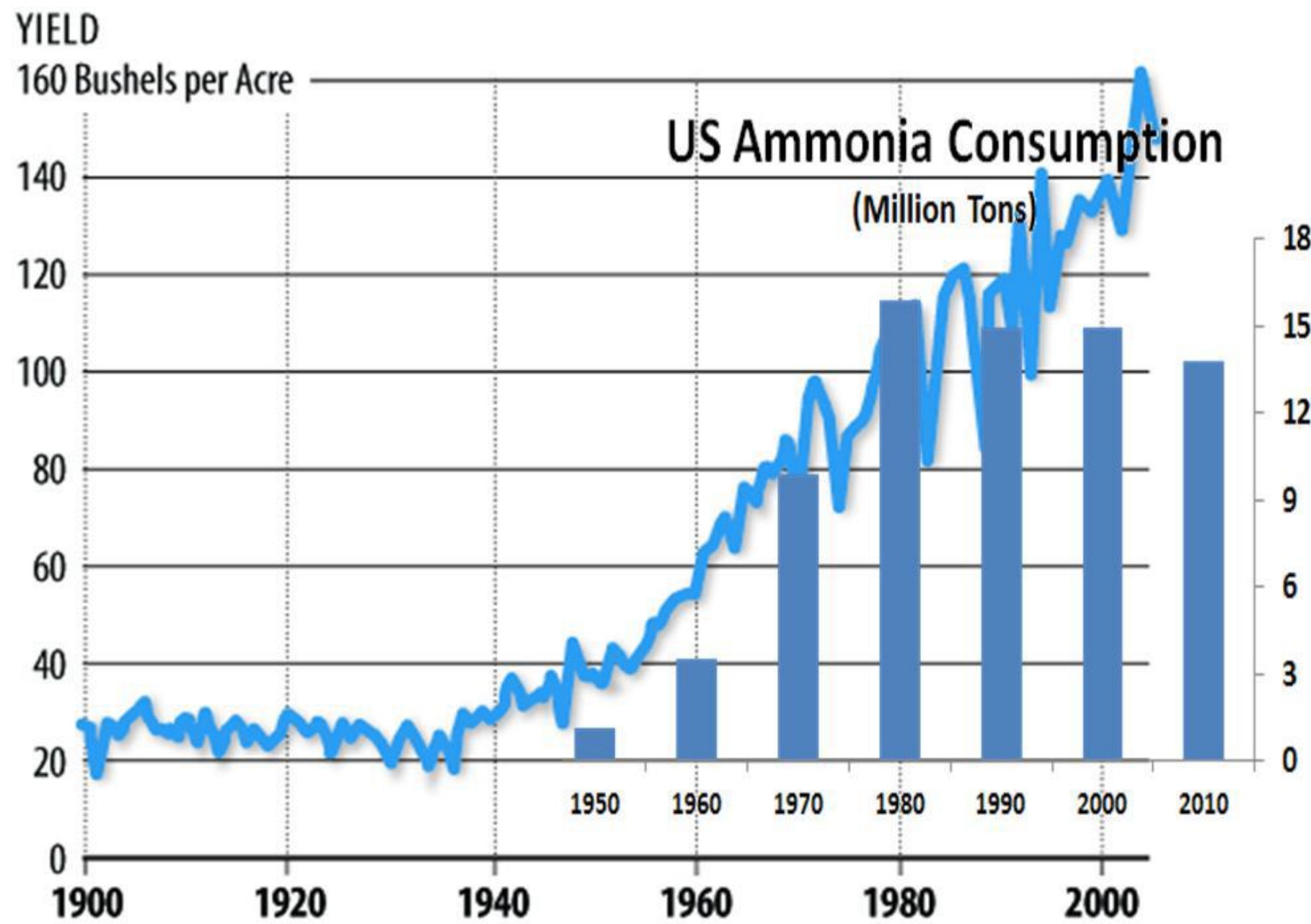
Ammonia consumption (bar graph) goes to the Haber process which turns natural gas into Ammonium Nitrate fertilizer.

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)...

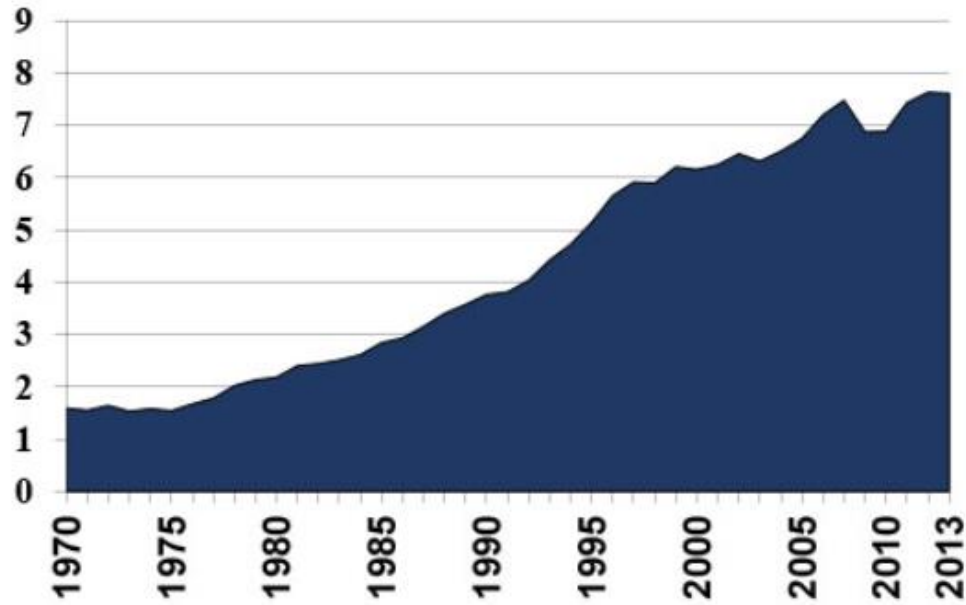
*In combination with pesticides, these fertilizers have quadrupled the productivity of agricultural land.”*

# U.S. Corn Grain Yields, 1900-2005



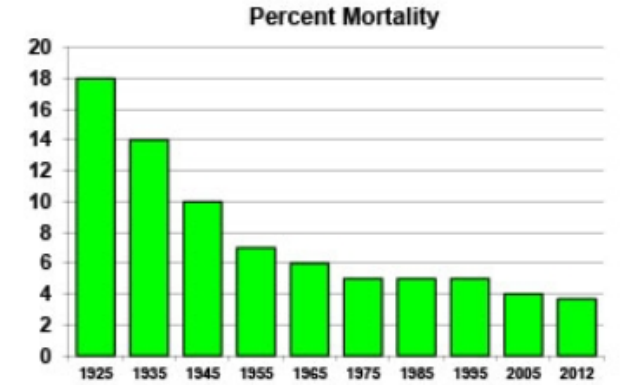
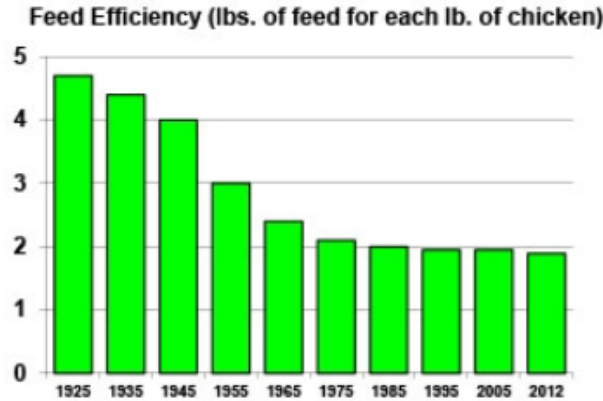
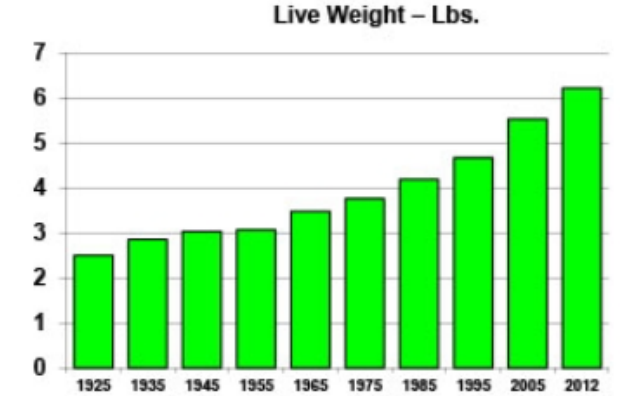
# Broiler Growth in Georgia

Pounds Produced: 1970 – 2013



Prepared by: Georgia Poultry Federation  
From: USDA NASS  
Updated: July 2014

## Research and Innovation Have Led to Dramatic Progress in Broiler Performance



Prepared by: Georgia Poultry Federation  
Source: University of Georgia



## Poultry Products in GA



- Poultry earns more than any other Georgia Agriculture commodity
- \$13.5 billion annually to Georgia's economy
- Georgia is 1st in the nation in broiler production



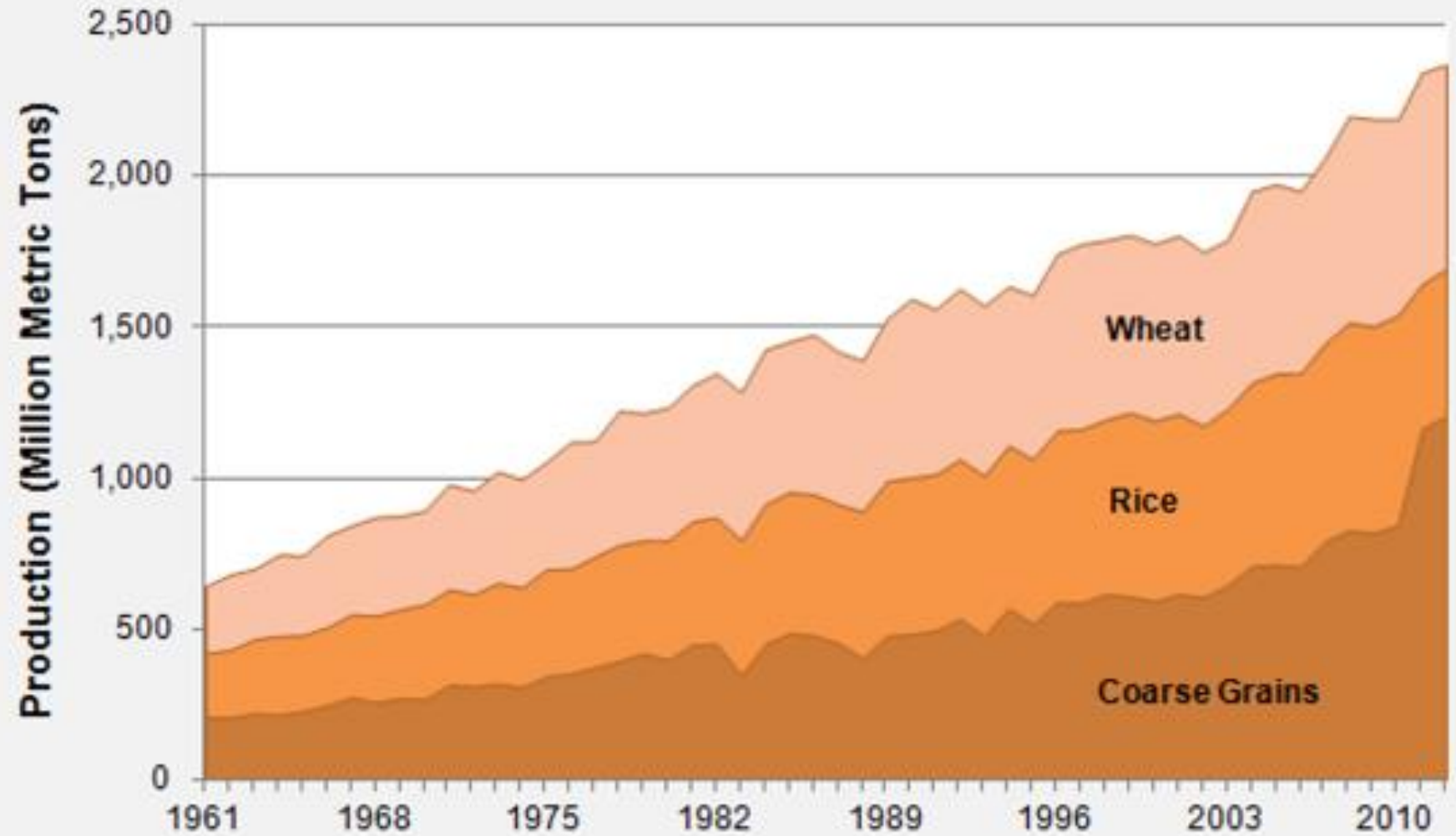
# The Devastating Impact of CO<sub>2</sub> on Agriculture

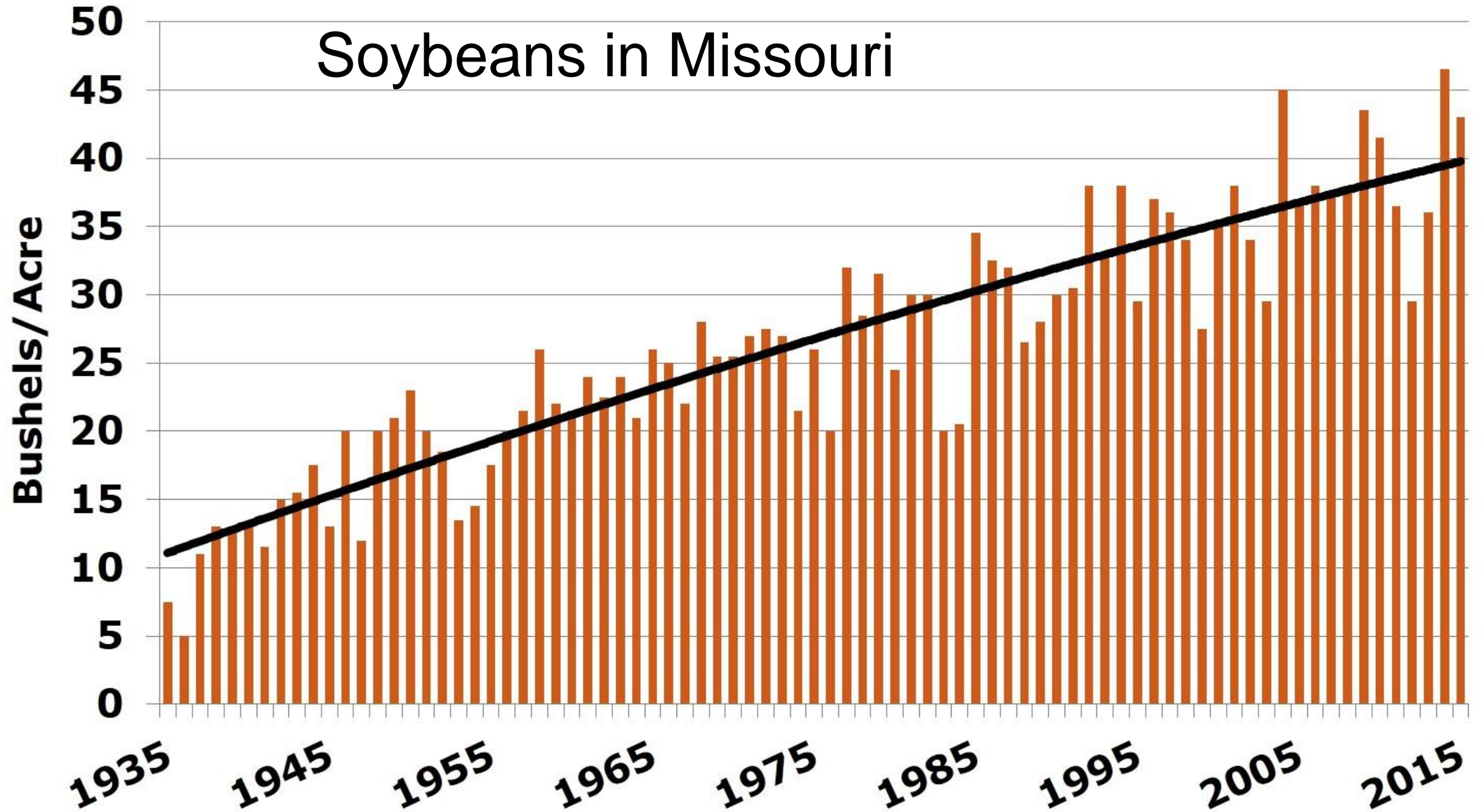
Title projects sarcasm on the alarmist claims.

Increasing atmospheric <CO<sub>2</sub>> has helped increase grain production worldwide.

Why don't alarmists ever note positive effects with increasing atmospheric <CO<sub>2</sub>>?

**Figure 1. World Grain Production, 1961-2012**





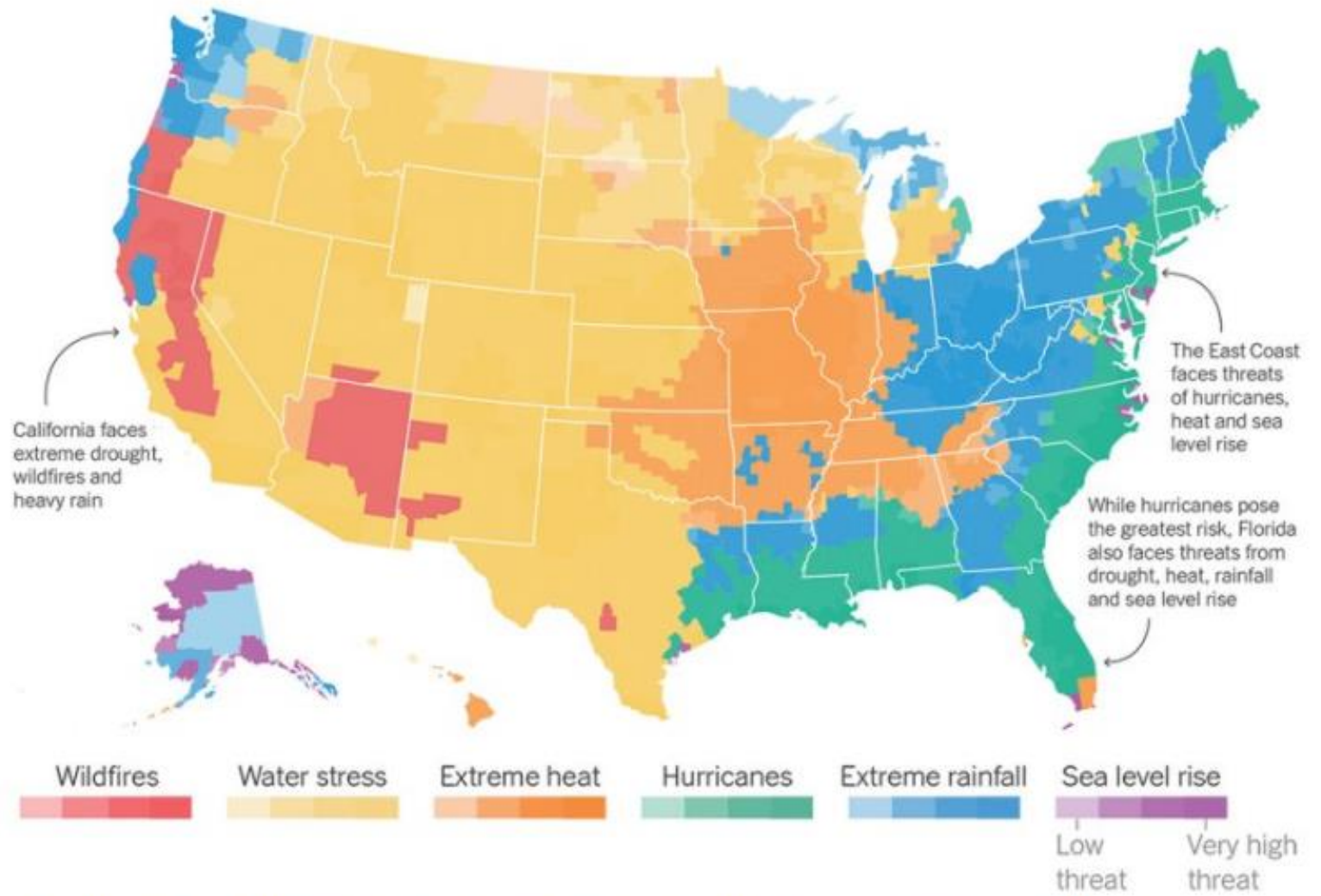
In my opinion, this map portrays the notion that human-caused, CO2-fueled global warming is causing significant climate damage all over the USA.

It is needlessly alarmist.

Following slides show the errors in this map, and the ignorance of the authors and AARP.

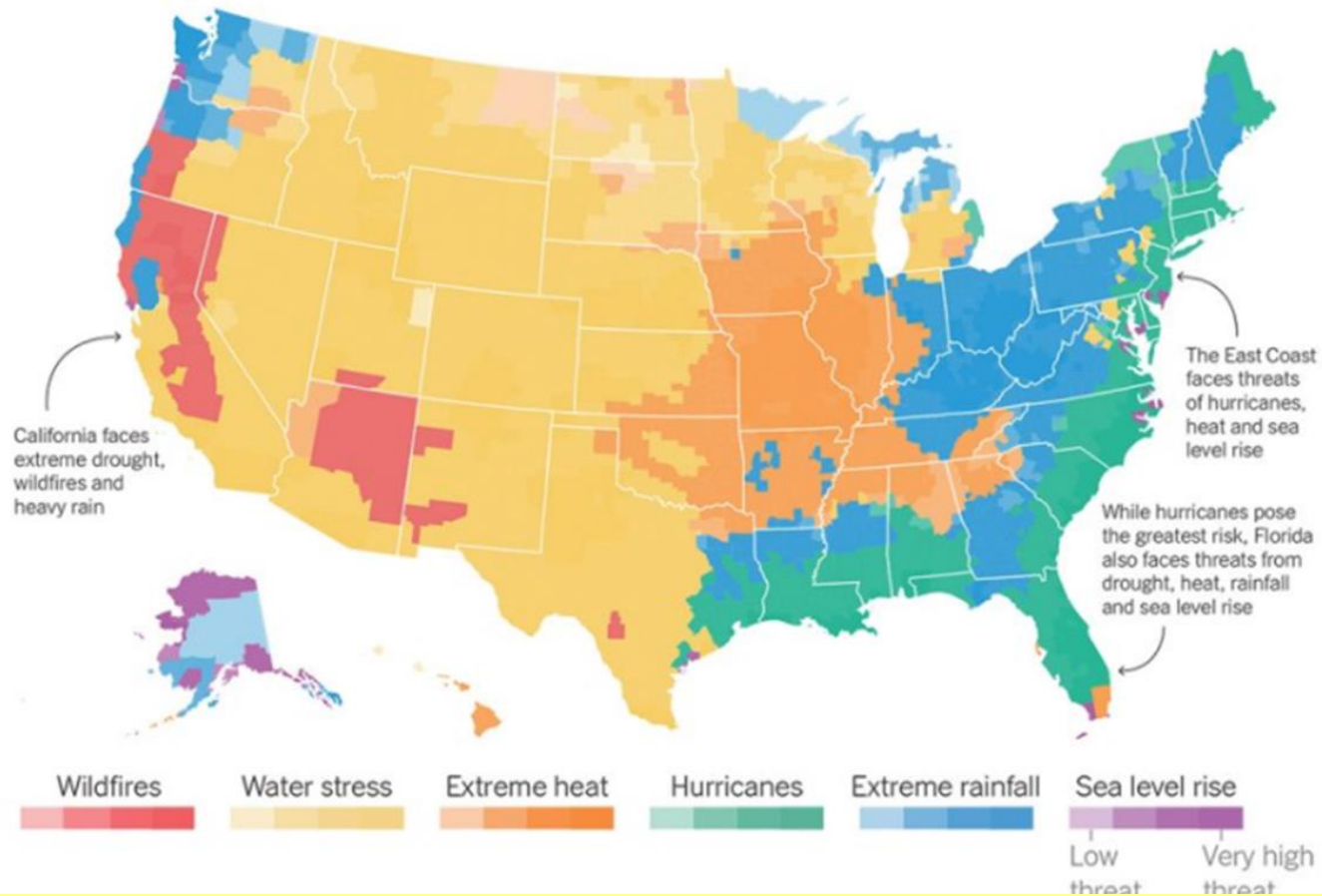
## What's the climate risk where you live?

Top climate risks in the U.S. by county — Wildfires, water stress, extreme heat, hurricanes, extreme rainfall, and sea level rise.



## What's the climate risk where you live?

Top climate risks in the U.S. by county — Wildfires, water stress, extreme heat, hurricanes, extreme rainfall, and sea level rise.



AARP cites “Four Twenty Seven, a climate research group affiliated with Moody's financial services company.”

Wouldn't these people be paid to show more “climate risk” is coming? Wouldn't they lobby for Government to jack up rates, making themselves and their insurance companies even richer?

**Something to think about.**

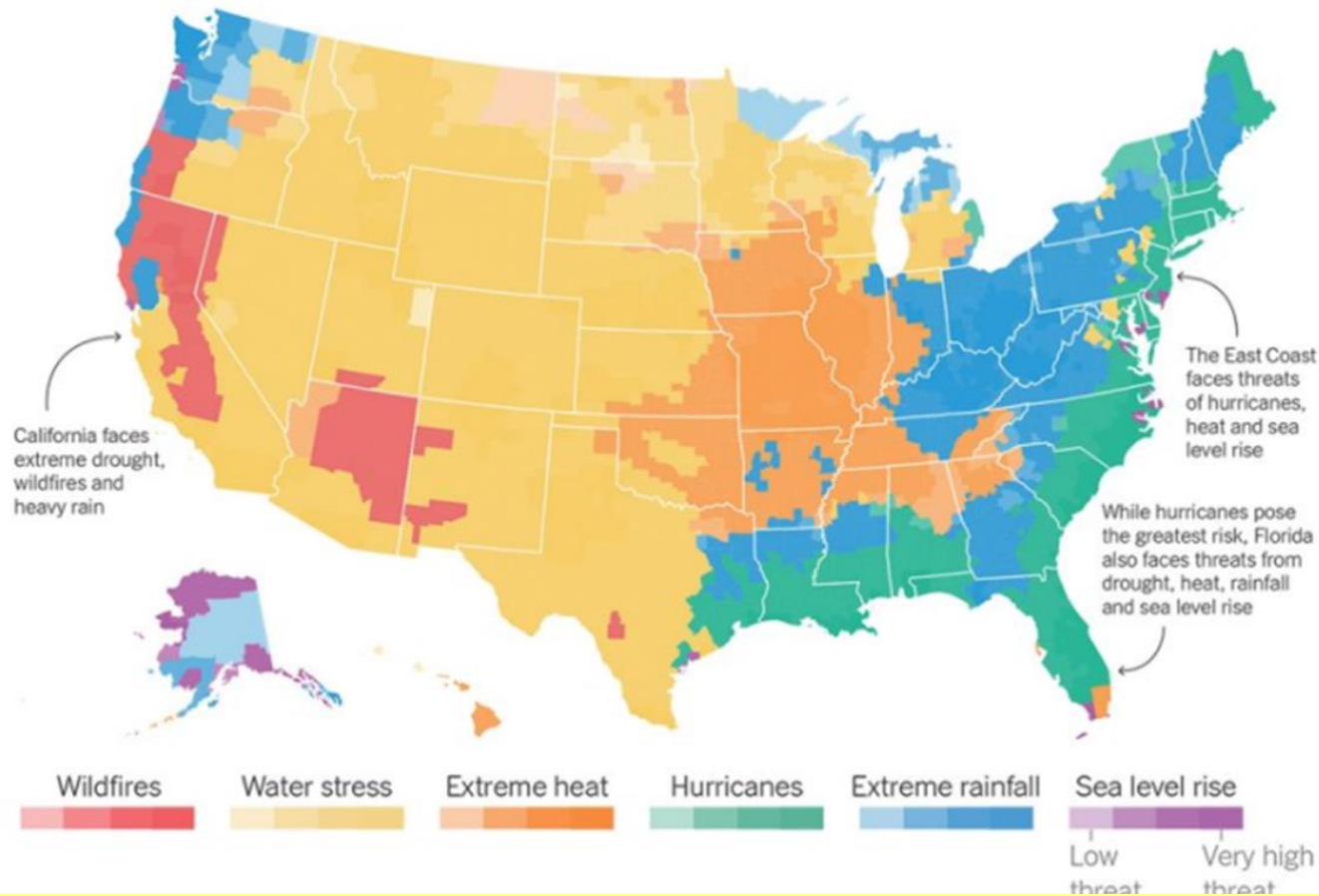
“No matter where you are in the U.S., you likely face some type of extreme weather. It's well known that some Western states are prone to wildfires, and areas along the Atlantic Ocean and the Gulf of Mexico are targets for hurricanes. But much of the rest of the country is experiencing other phenomena, according to Four Twenty Seven, a climate research group affiliated with Moody's financial services company.

“Water stress” reflects an increasing demand for water in areas that can face drought-like conditions.”



## What's the climate risk where you live?

Top climate risks in the U.S. by county — Wildfires, water stress, extreme heat, hurricanes, extreme rainfall, and sea level rise.



The “Extreme rainfall” from the ArkLaTex and Mississippi to Vermont, New Hampshire and Maine is an artifact of better rainfall catch from the NWS modernization of the 1990s.

<https://casf.me/recent-downpours-increasing-never-mind-its-another-alarmist-claim-demolished-by-careful-observation/>

Next Graphic

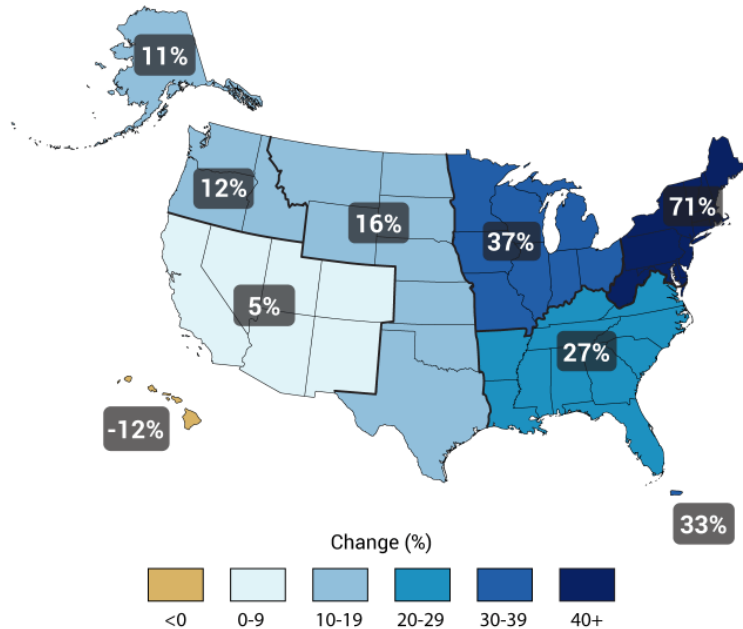
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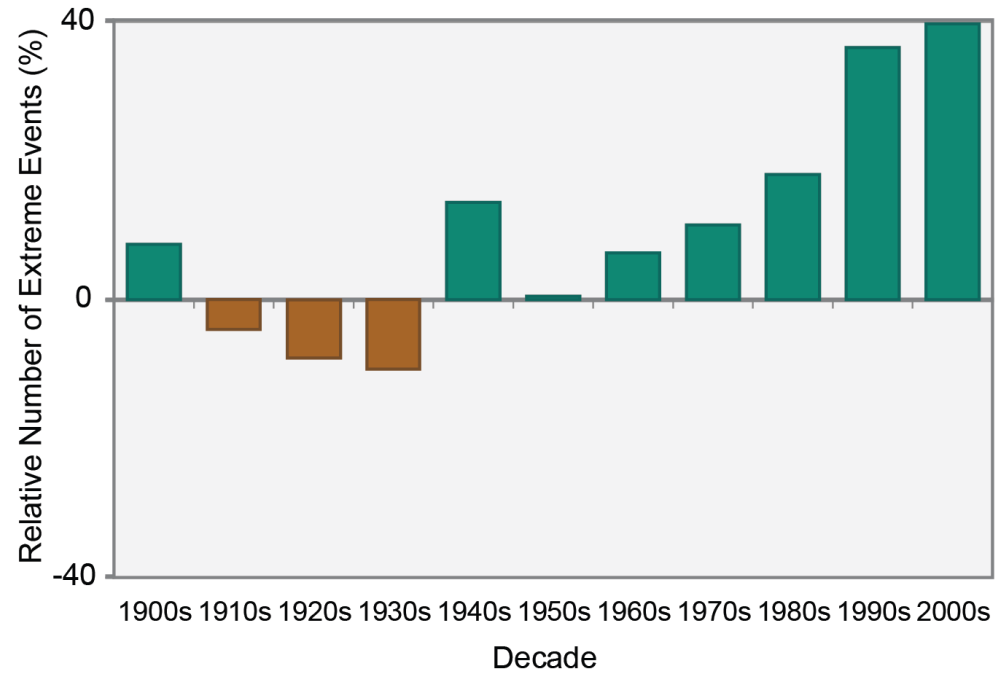
<https://casf.me/recent-downpours-increasing-never-mind-its-another-alarmist-claim-demolished-by-careful-observation/>

We now know that these precipitation increases are real, but they are artifacts of improved collection of precipitation with dual-shielded ASOS gages, not changing climate.

Figure 2.18: Observed Change in Very Heavy Precipitation



## Observed U.S. Trend in Heavy Precipitation

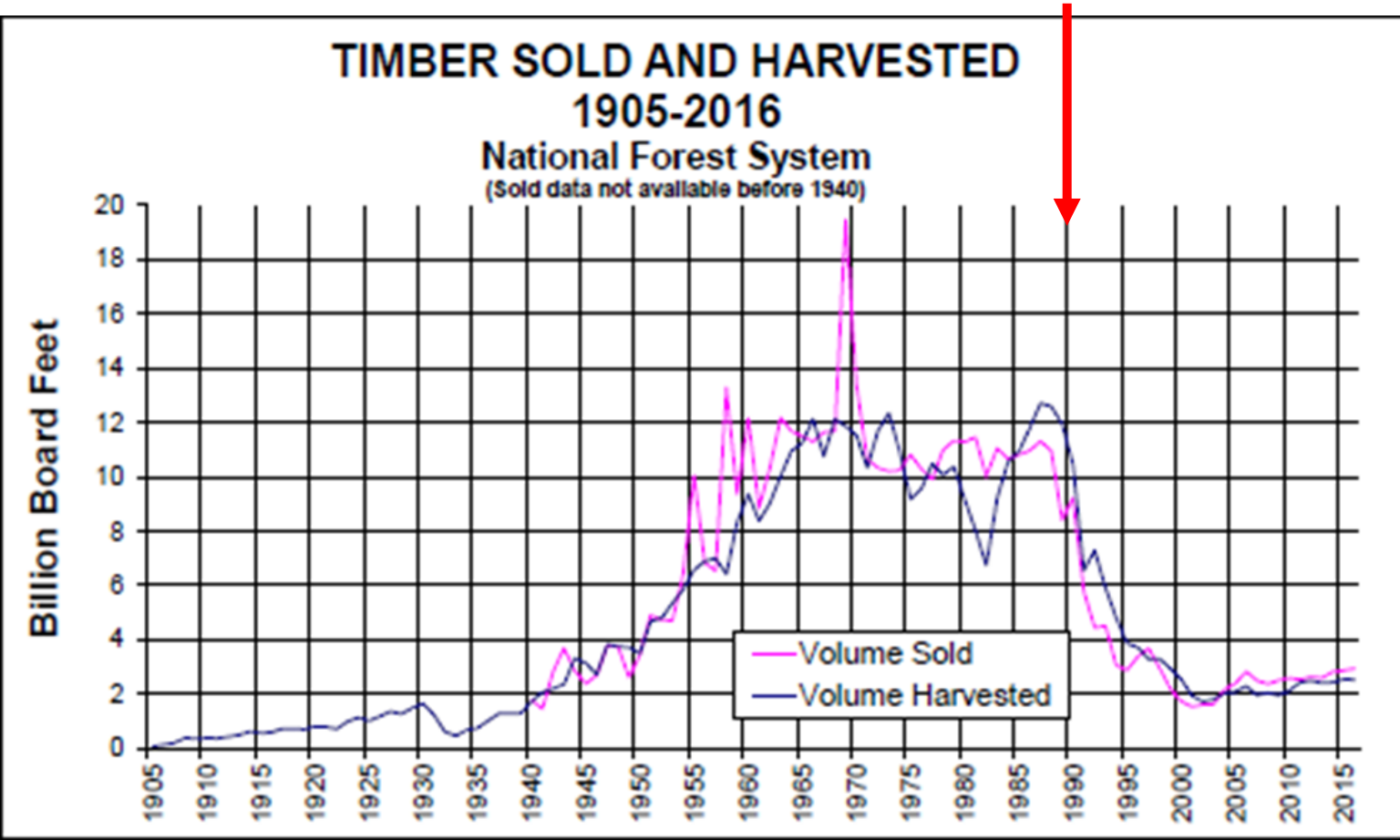




### 1990s Spotted Owl controversy

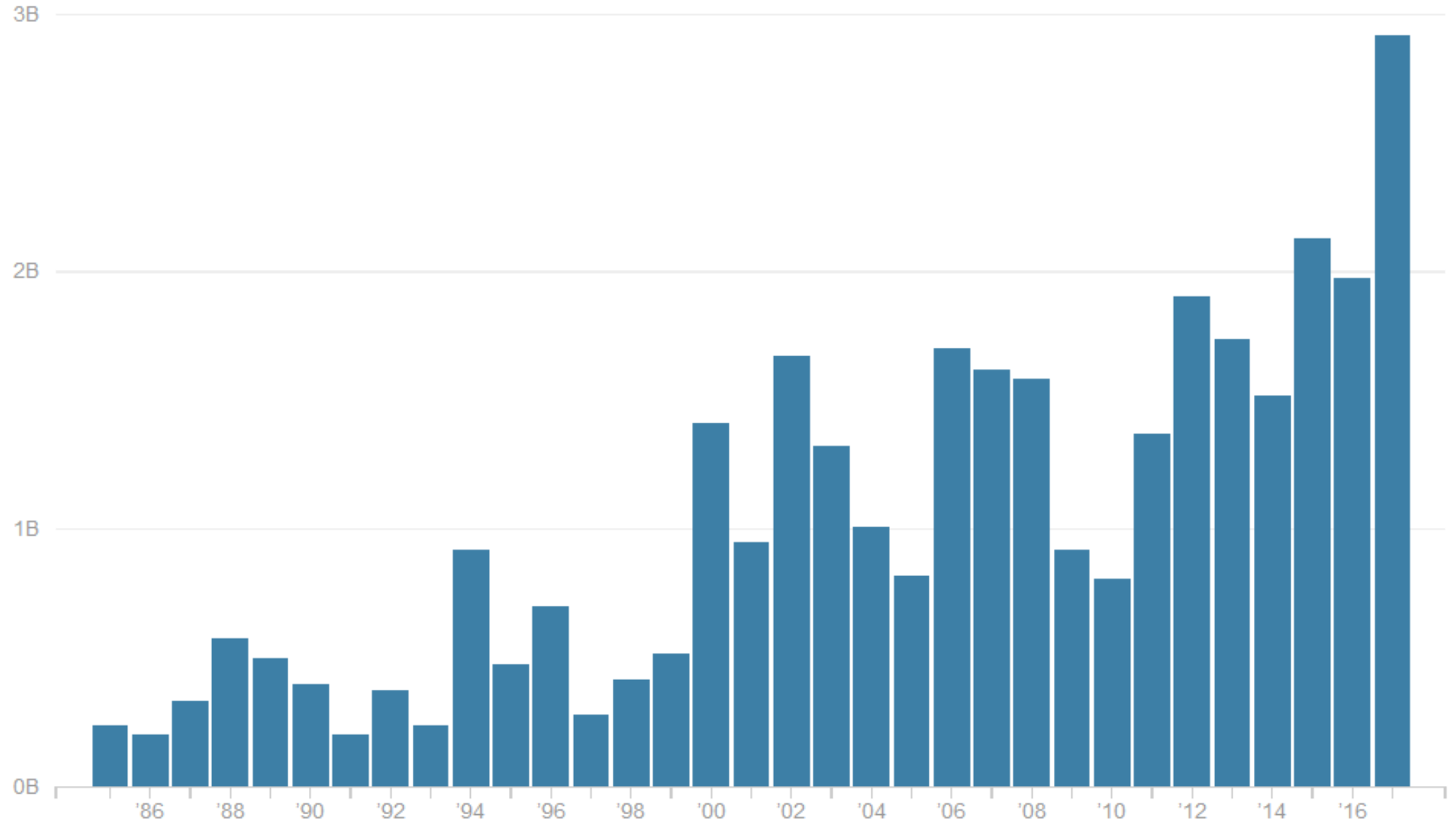
- Spotted Owl listed as a threatened species under the Endangered Species Act in 1990 throughout its range in northern California, Oregon, and Washington.
- 1991 Court order halted logging on national forests in those states on grounds those forests were prime spotted owl habitats.
- Logging all but stopped on western forests as the graph shows.

Precipitous logging decline after 1990 is especially telling.



Red arrow points to 1990

## Billions Of Dollars Spent On Wildfire Suppression In The U.S. 1985-2017

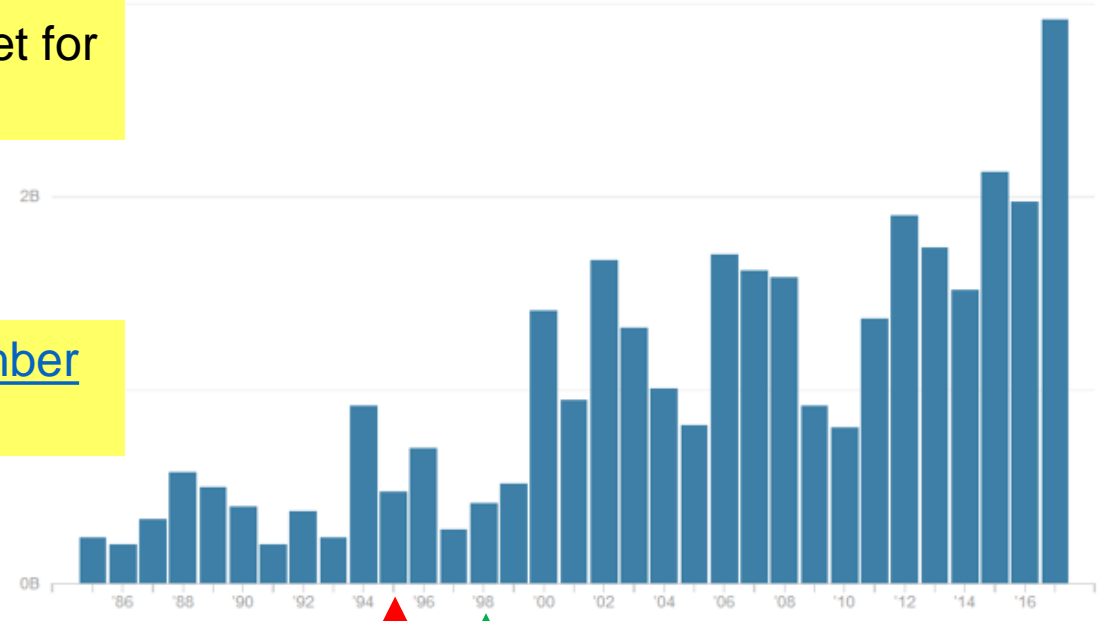


### Cause and Effect?

As the harvest in board feet was decimated, the stage was set for increasing dollar amounts needed for fire suppression.

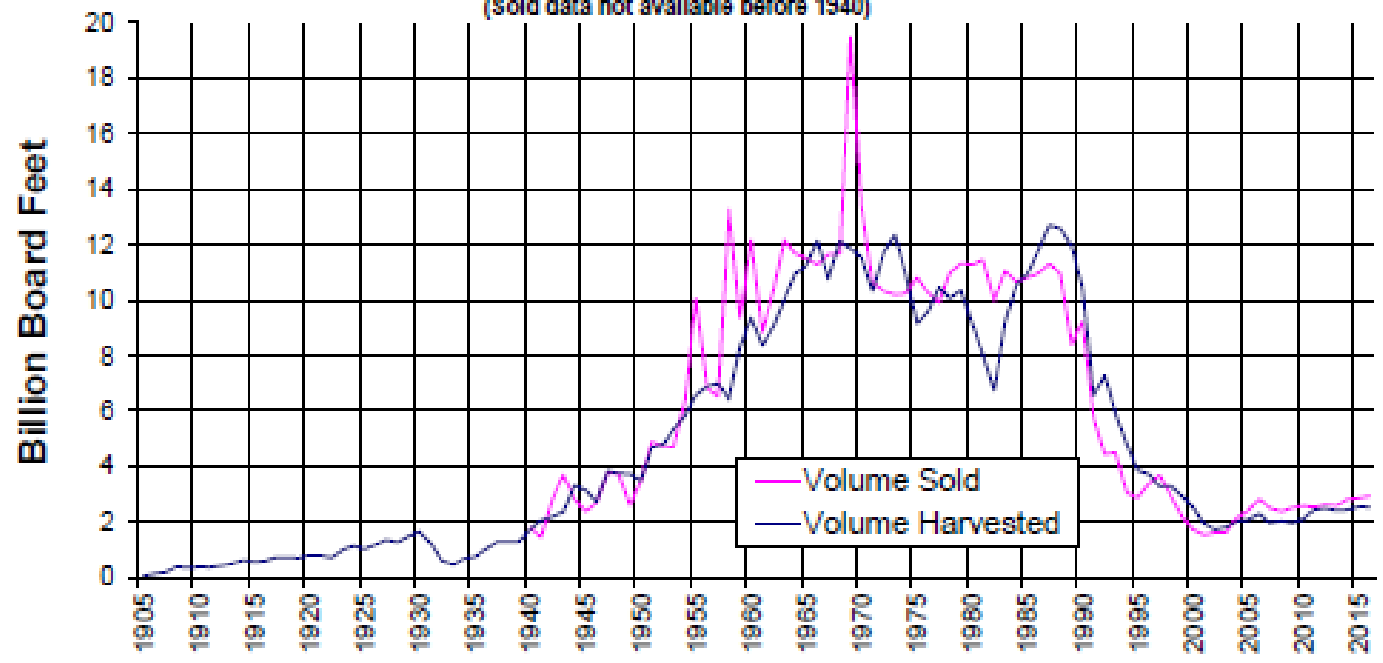
Red arrows point to 1995.

<https://www.fs.fed.us/forestmanagement/products/images/TimberSoldHarvested1905-2016.png>



### TIMBER SOLD AND HARVESTED 1905-2016

National Forest System  
(Sold data not available before 1940)



PDO Warm  
Wet in West

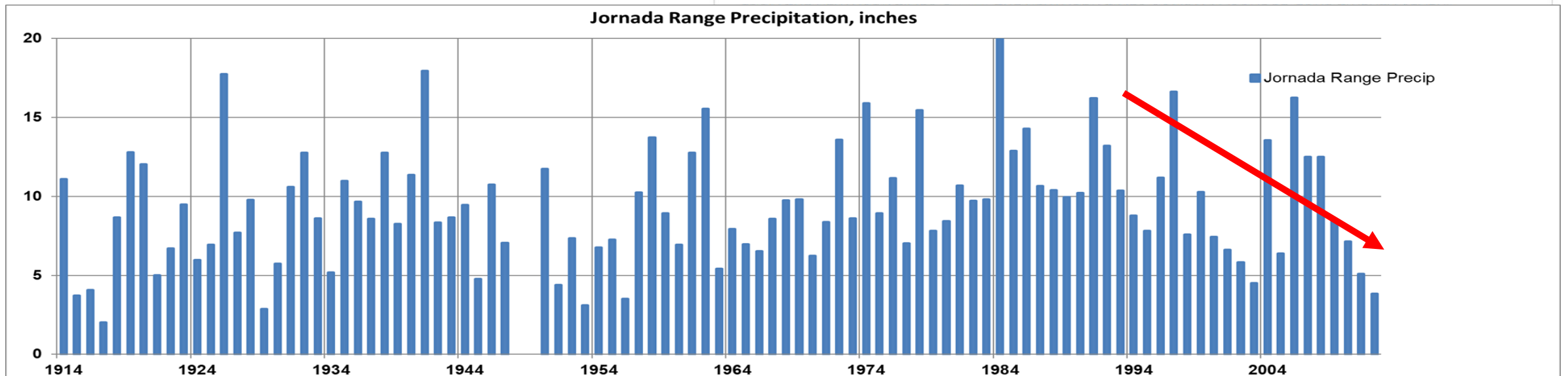
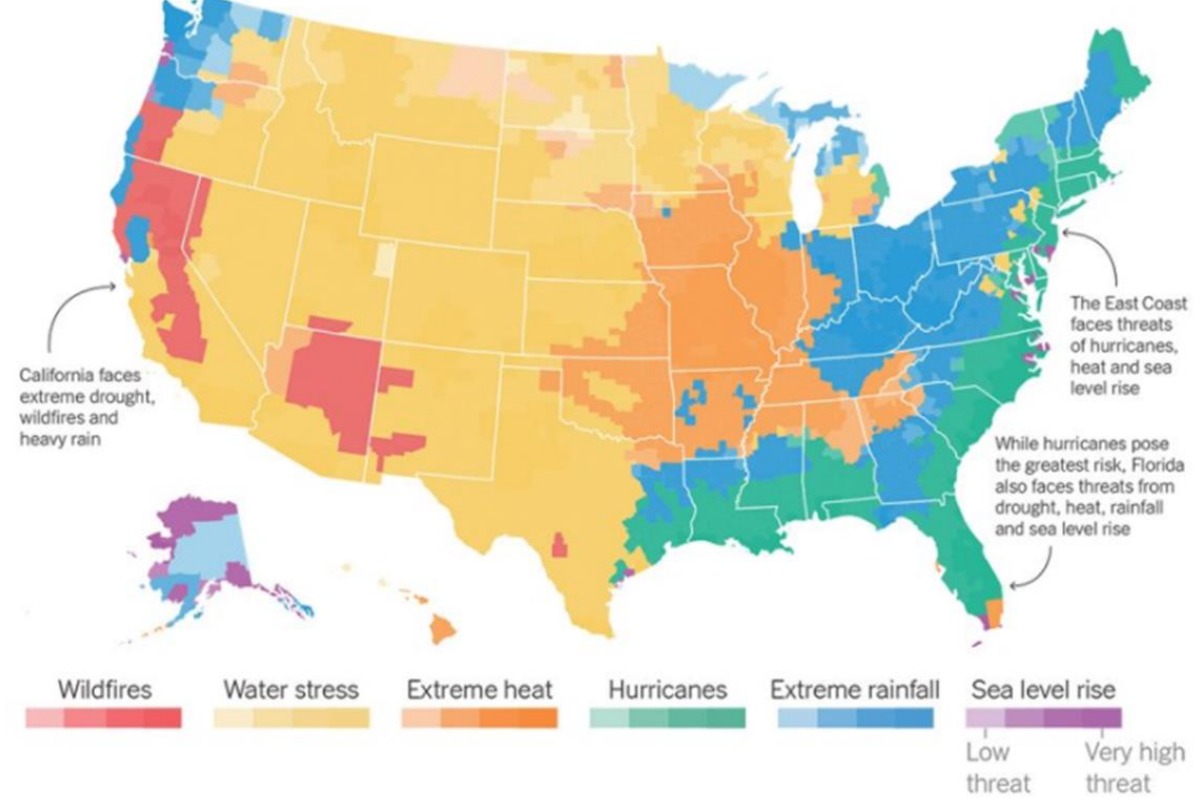
PDO Cold  
Dry in West

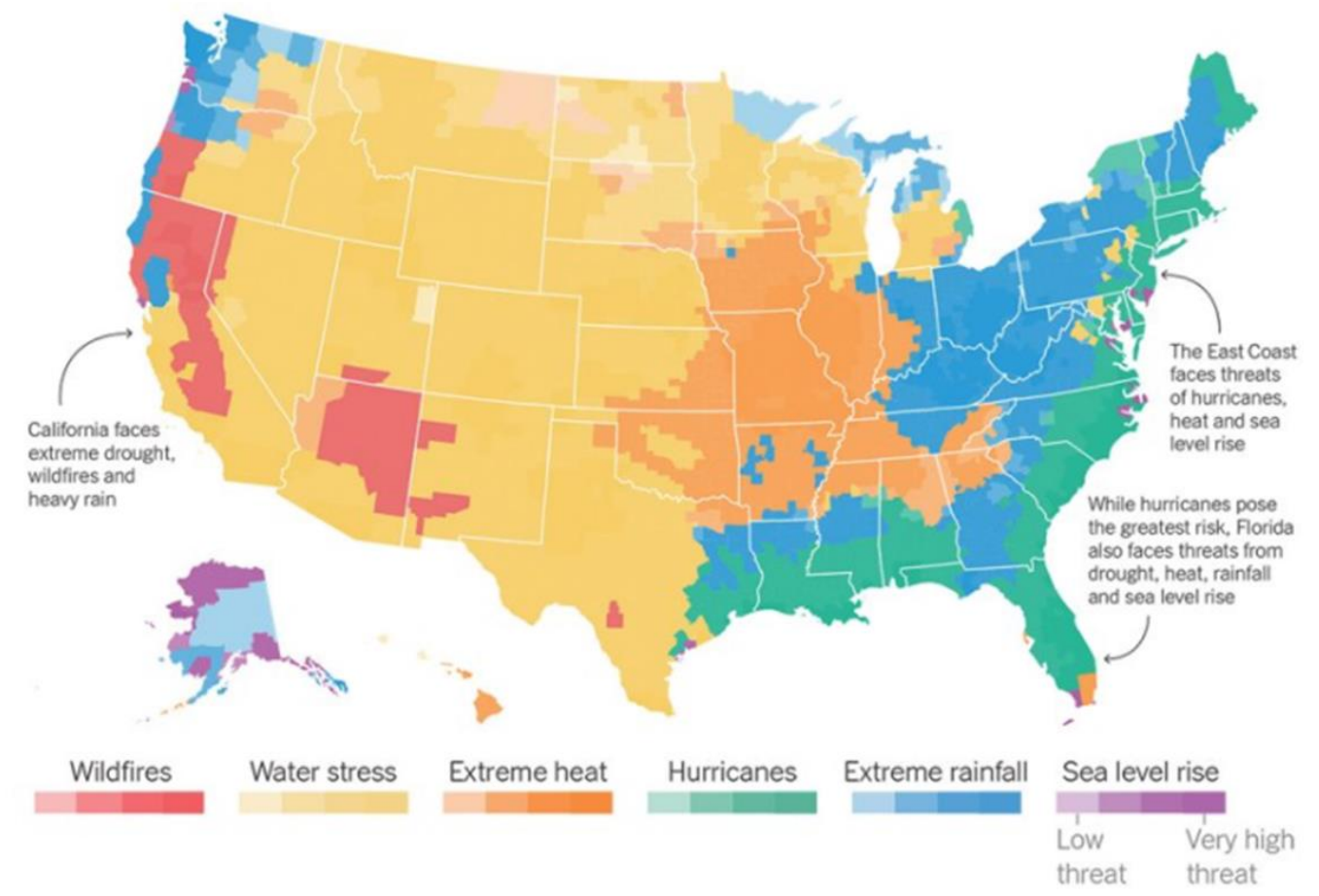
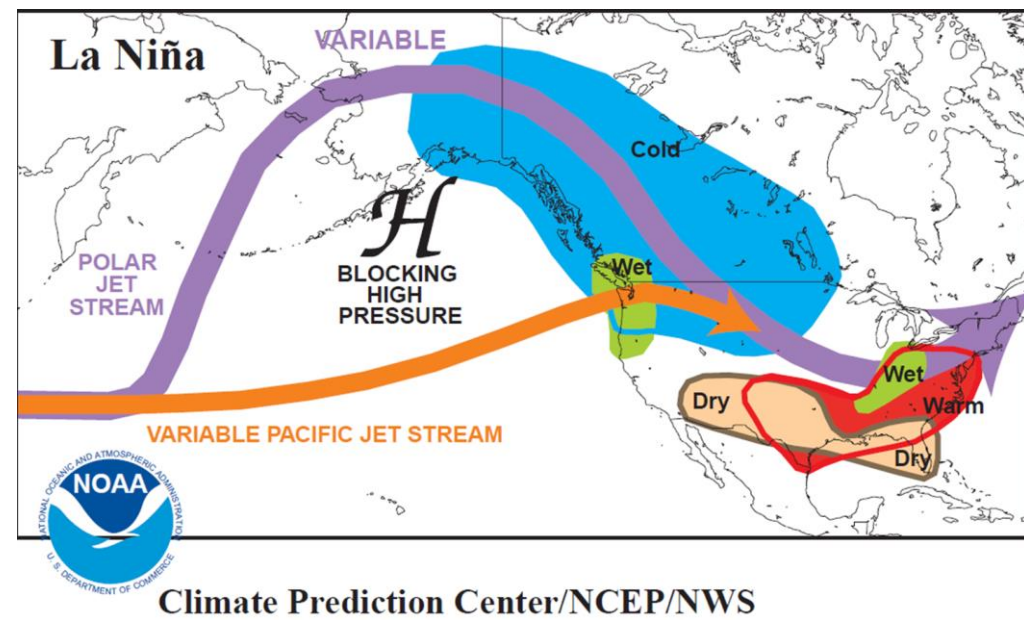
<https://www.npr.org/2018/11/26/670812889/what-you-need-to-know-about-the-new-u-s-climate-assessment>

Green Arrow Points to 1998, when the Pacific Decadal Oscillation, PDO, a 60-year long weather event, shifted from Warm to Cold, and from Wet to Dry

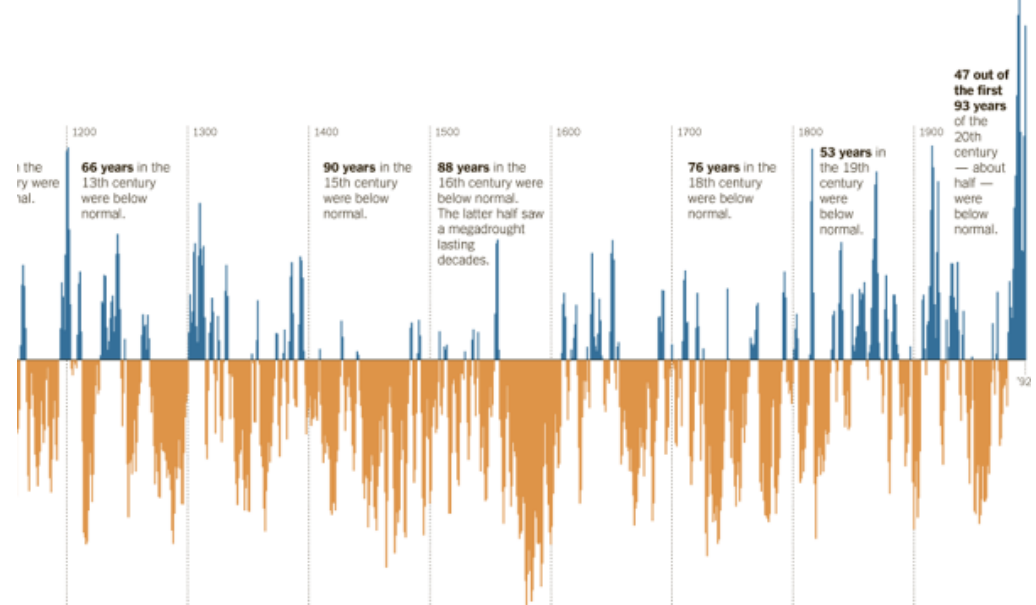
I contend, and the data show, that the huge area of significant water stress in the mountain west extending into the plains states comes from the change in the Pacific Decadal Oscillation from warm (and wet) in the 1980s and 1990s to cold (and dry) in 1998-1999.

Below is the annual rainfall at the Jornada Range in southern New Mexico.





Rainfall and Drought Chart: New York Times...U of A Tree Ring Laboratory



X-Axis Time: 1200s on LEFT -- present on RIGHT  
 Y-Axis: Rainfall (Blue, above Axis) Drought (Brown, Below Axis)  
 Axis = 20<sup>th</sup> Century Avg 1900-1993

Upper Left. La Nina brings dry conditions from southern California to Florida from 1-3 years' duration.

PDO-Dry brings about 30-35 years with more La Nina events

Left: Rainfall and Drought chart shows <PDO> bunching of rainfall and drought phases over past 800 years in New Mexico.



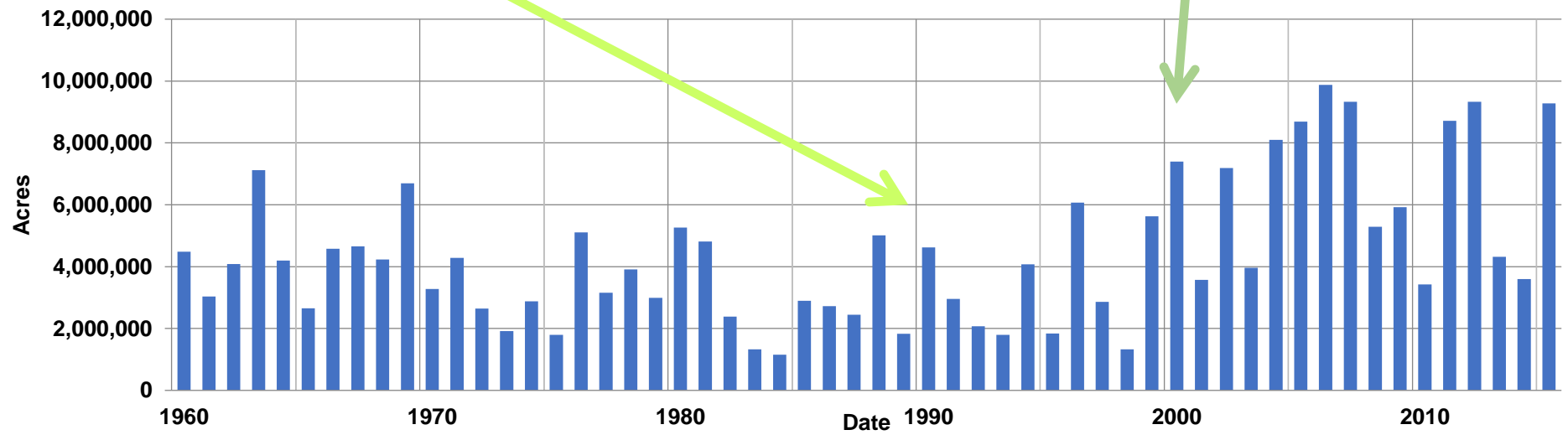


<https://www.nifc.gov/fireInfo/nfn.htm>

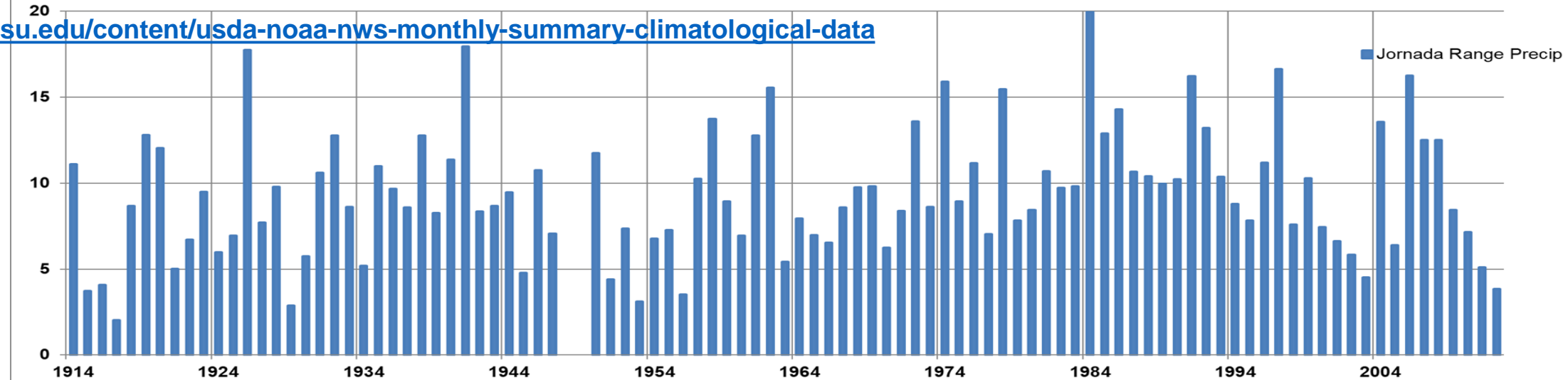
PDO Positive, more El Ninos  
more winter rains, fewer acres  
burned

PDO Negative, more La Ninas  
More drought conditions, more burned acres  
California to Florida and S Carolina

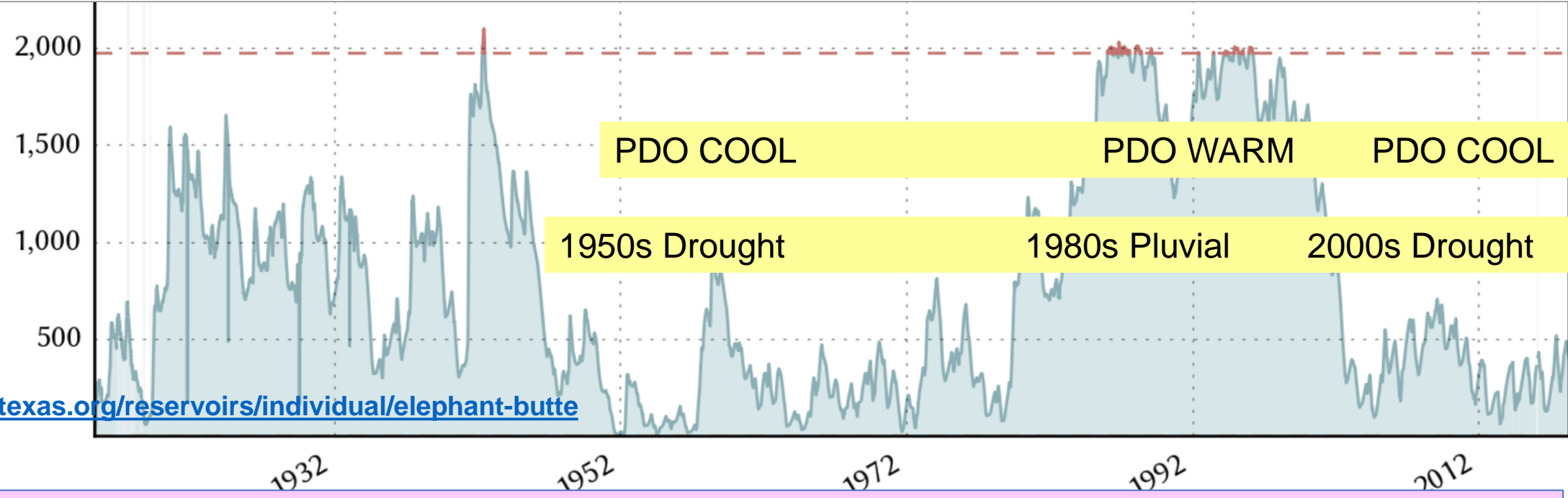
Acres Burned



Jornada Range Precipitation, inches



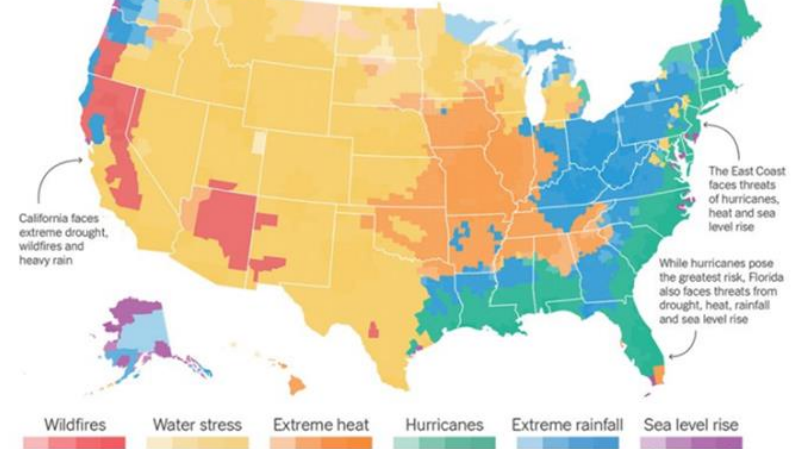
Reservoir Storage (thousand acre-feet)



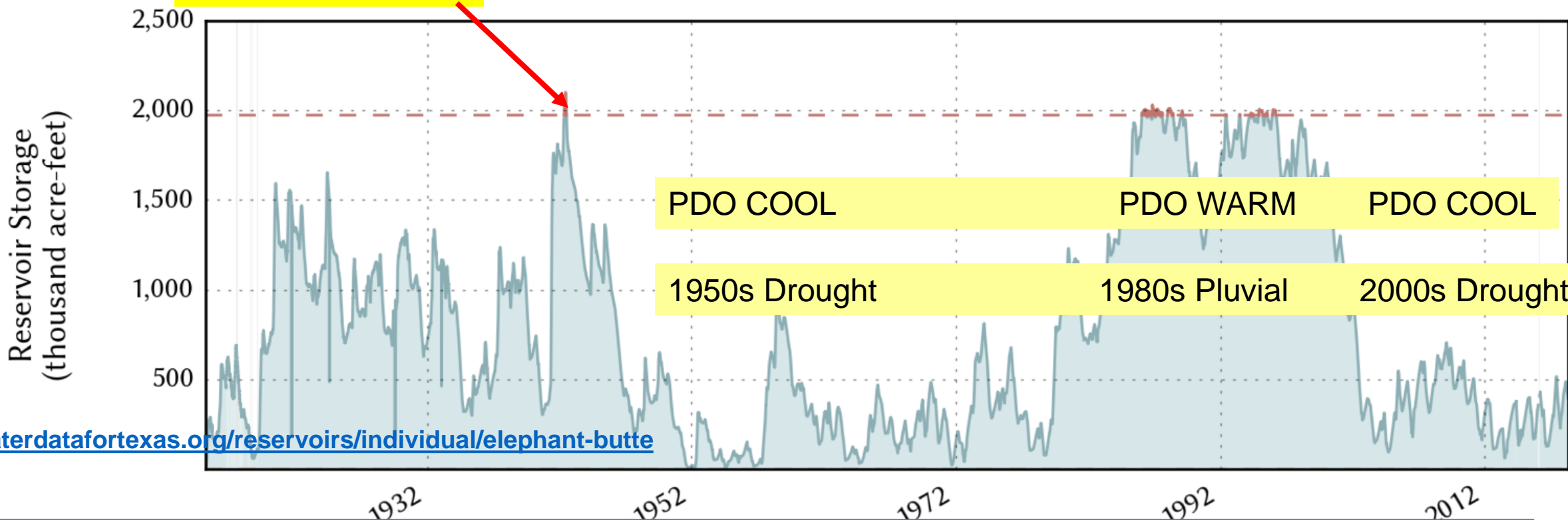
**PDO-Warm cycle of late 20<sup>th</sup> century resulted in rainfall maximums of the 1980s-early 1990s, which filled Elephant Butte Reservoir to the brim; year 1999 shift to PDO cold, not more <CO2>, has resulted in drought years. Low reservoir levels of recent years mimics low levels during the 1950s droughts, 60 years ago.**

AARP's "water stress" in the west is a result of the changeover to PDO Cool Conditions.

It is part of the climate we have, not human-caused CO2-fueled climate change.



1941 Grand El Nino

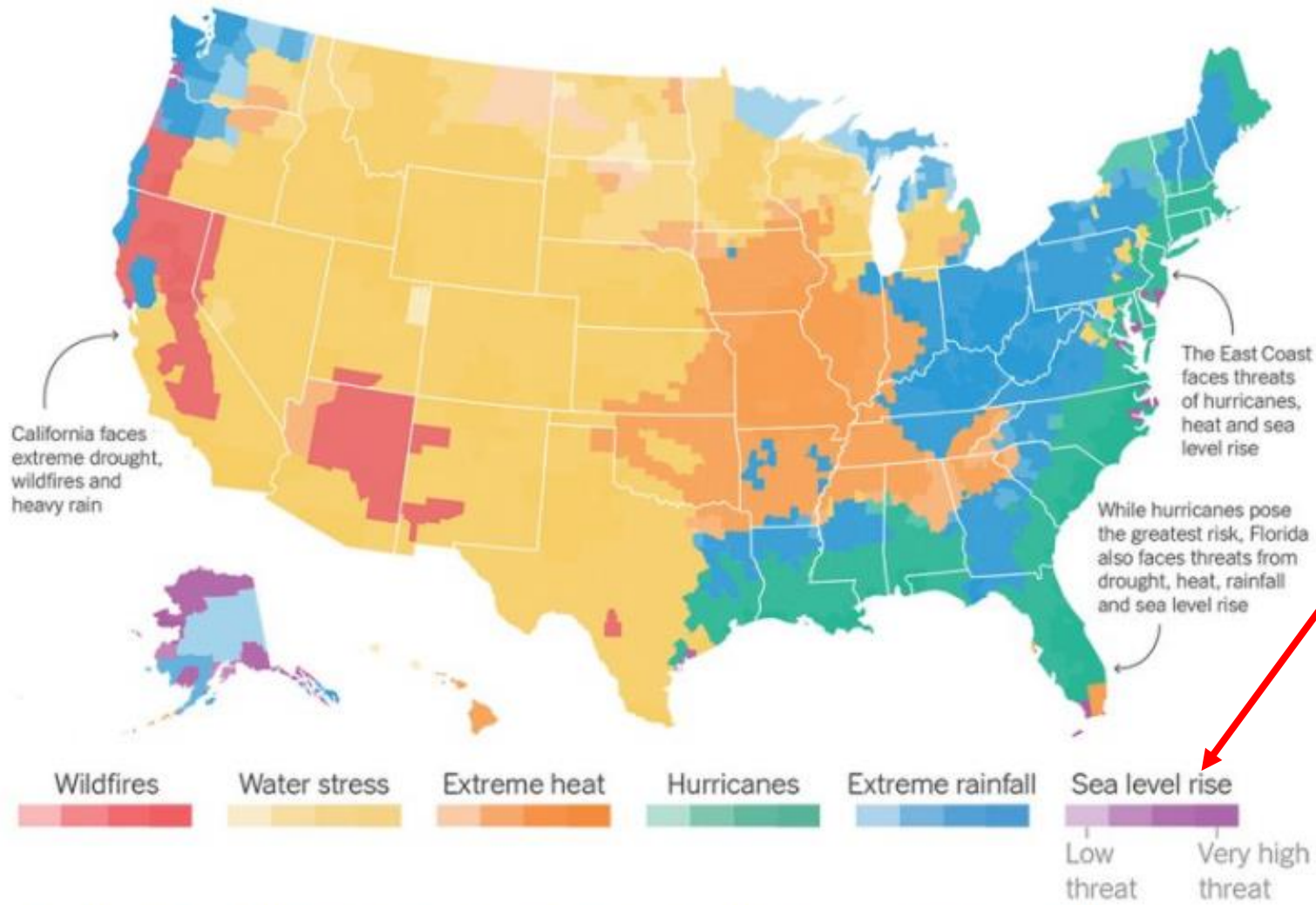


<https://waterdatafortexas.org/reservoirs/individual/elephant-butte>

PDO-Warm cycle of late 20<sup>th</sup> century resulted in rainfall maximums of the 1980s-early 1990s, which filled Elephant Butte Reservoir to the brim. The year 2000 shift to PDO-Cold, not more <CO2>, has resulted in drought years. Low reservoir levels of recent years mimics low levels during the 1950s droughts, 60 years ago.

# What's the climate risk where you live?

Top climate risks in the U.S. by county — Wildfires, water stress, extreme heat, hurricanes, extreme rainfall, and sea level rise.

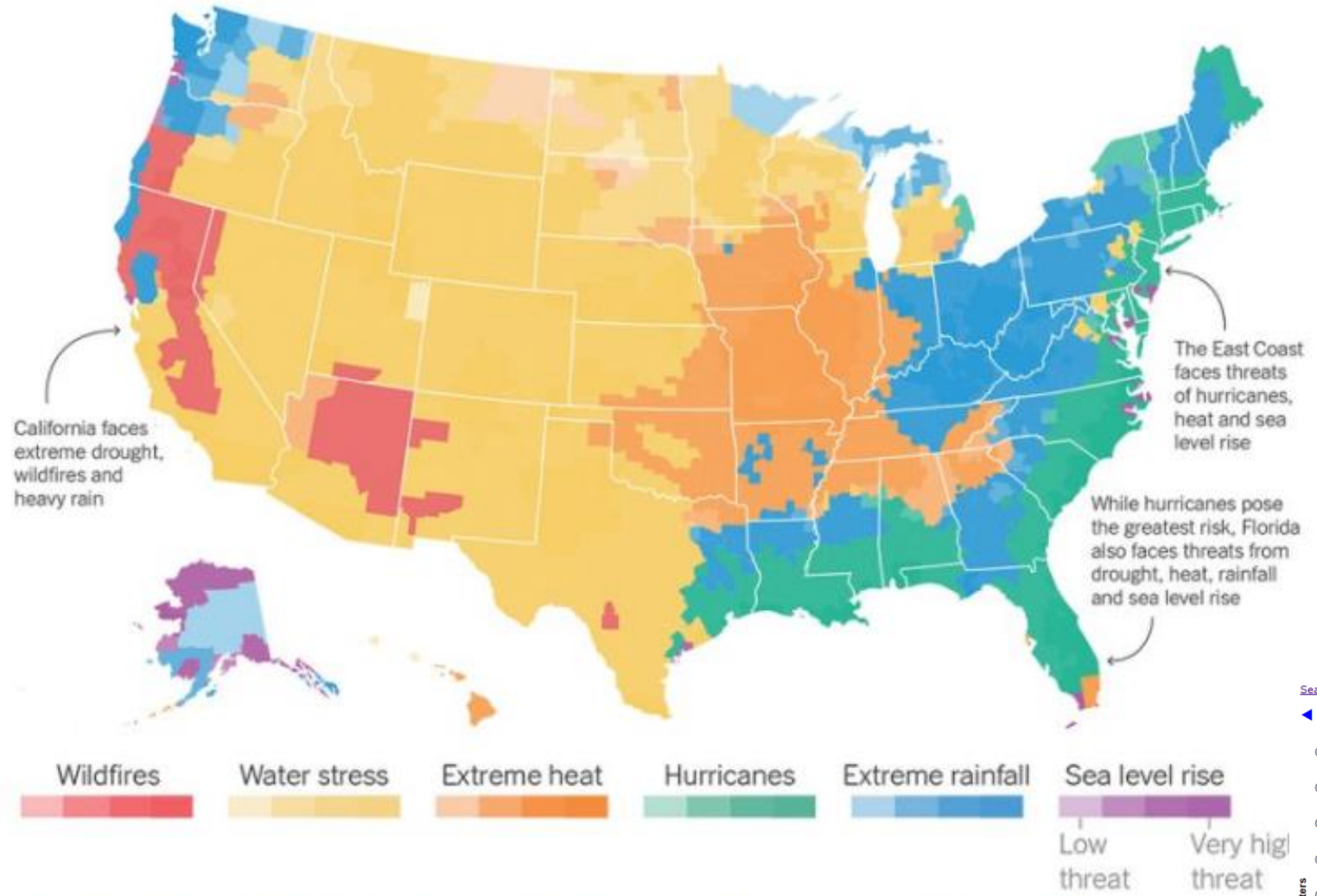


Let's look at Sea Level Rise.

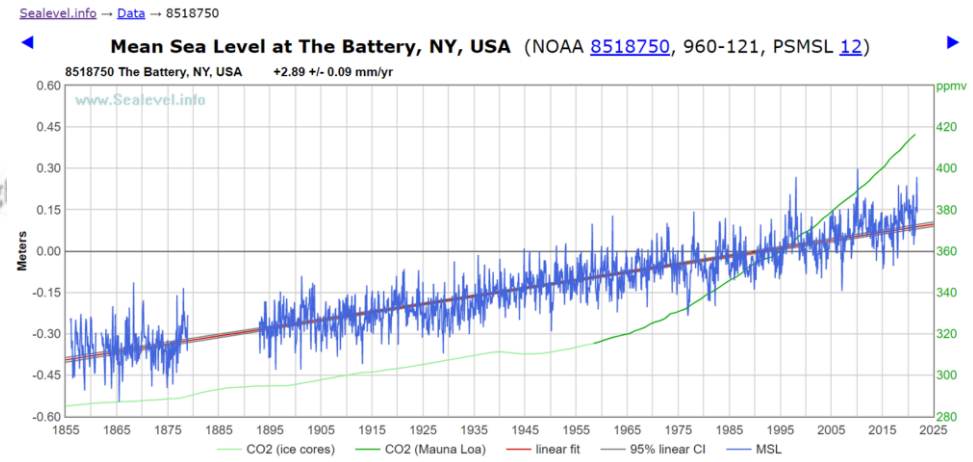
Later,

We'll expand that map of Alaska.

Top climate risks in the U.S. by county — Wildfires, water stress, extreme heat, hurricanes, extreme rainfall, and sea level rise.



FROM THE NEW YORK TIMES © 2020 THE NEW YORK TIMES COMPANY (SOURCE: FOUR TWENTY SEVEN)

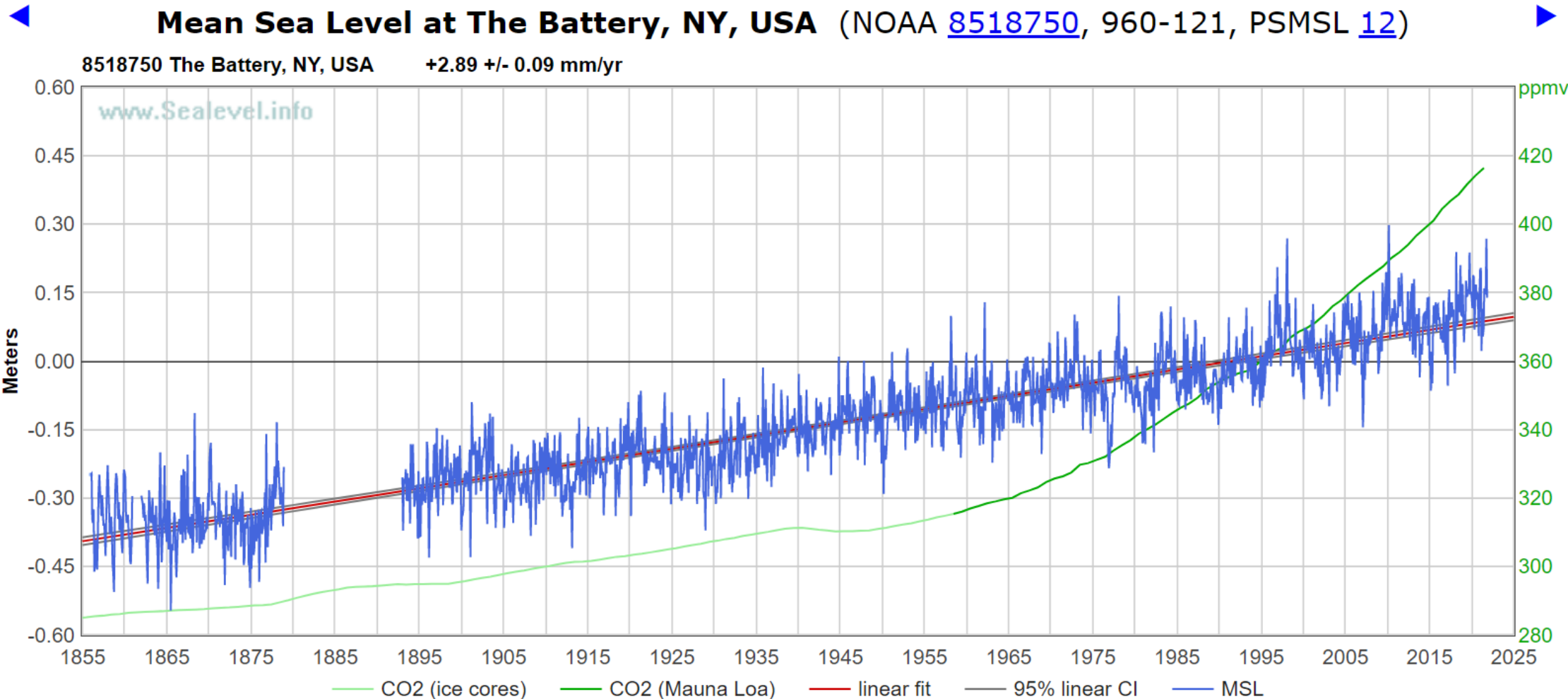


**Sealevel.info** contains both the archived NOAA time series data on sea level height, and the <CO2> from Mauna Loa and the Ice Cores. Data plotted are for the Battery, at the southern tip of Manhattan, and start in **1856, when Franklin Pierce was US president** and show that the rate of change of sea level rise has not changed since 1856.

**This plot shows that the notion that sea level is unrelated to <CO2> here, or anywhere on Earth.**

[Sealevel.info](http://www.sealevel.info) → [Data](#) → 8518750

[http://www.sealevel.info/MSL\\_graph.php?id=Battery](http://www.sealevel.info/MSL_graph.php?id=Battery)

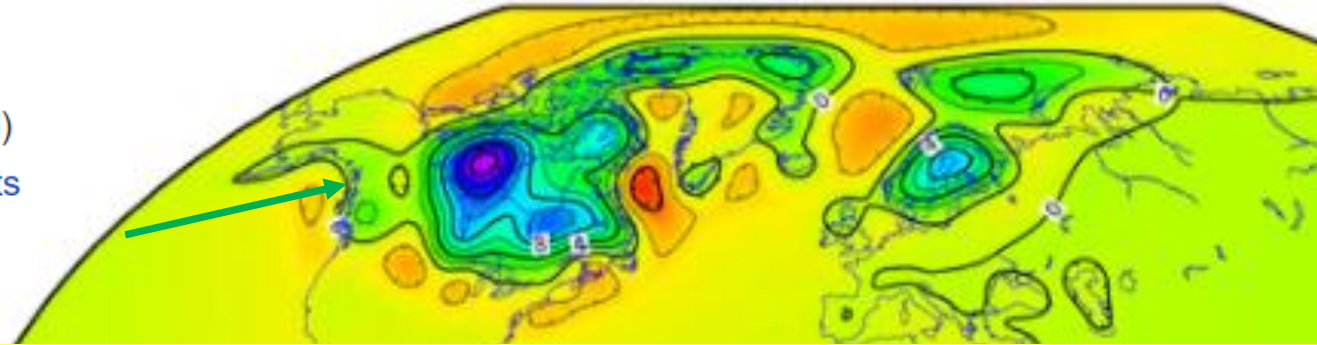


# Post-glacial rebound

From Wikipedia, the free encyclopedia

**Post-glacial rebound** (also called **isostatic rebound** or **crustal rebound**) is the rise of land masses after the removal of the huge weight of ice sheets during the last glacial period, which had caused isostatic depression.

vertical crustal motions in mm per year via GIA theory



Notice the areas of Pacific Coastal Alaska, the parts adjacent to the Gulf of Alaska, in bright green.

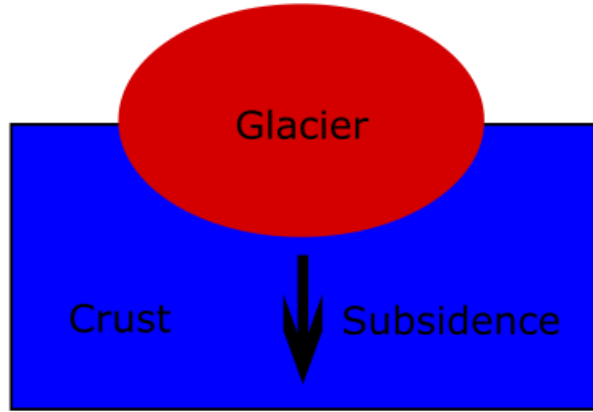
These are areas where the land is rising significantly, about 3mm per year.

Tide gages cannot tell the difference between sea level change and land rising, post-glacial rebound, or land falling, where ground water has been pumped from the interstitial spaces in unconsolidated sediments, mass is removed, and the land falls; sometimes it falls rapidly.

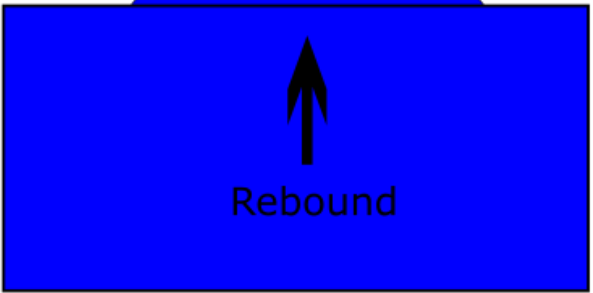
As will be seen in the following sequence of graphics, AARP portrays areas along the Gulf of Alaska coast as suffering rapid sea level rise when the opposite is true, the land is rising rapidly, and the sea is falling away.

AARP's authors have no idea how absolutely wrong these Alaska claims of sea level rise are!

Before

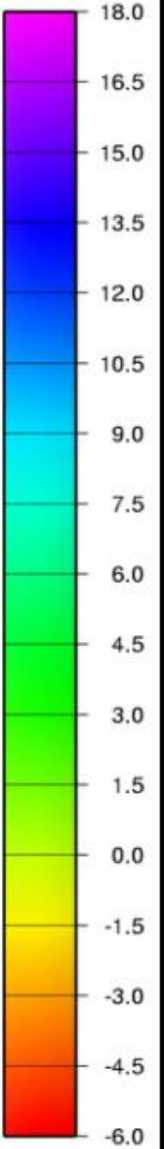
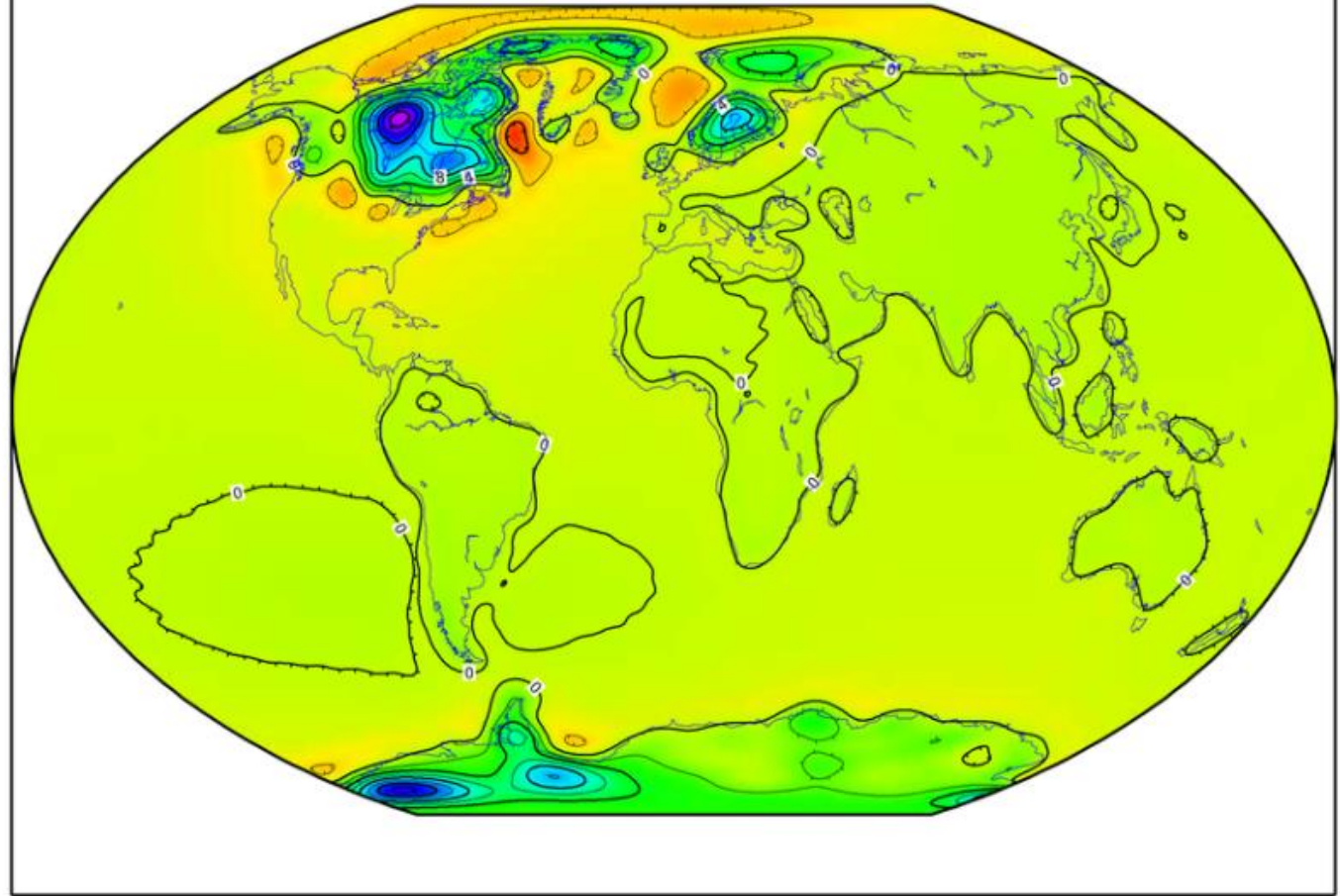


Crust



After

vertical crustal motions in mm per year via GIA theory





*“Successive shorelines show isostatic rebound,”* a photo from the Canadian North, shows rebound of far northern North America after ice from the Wisconsin Ice Sheet melted away, some 20,000 to 10,000 years ago.

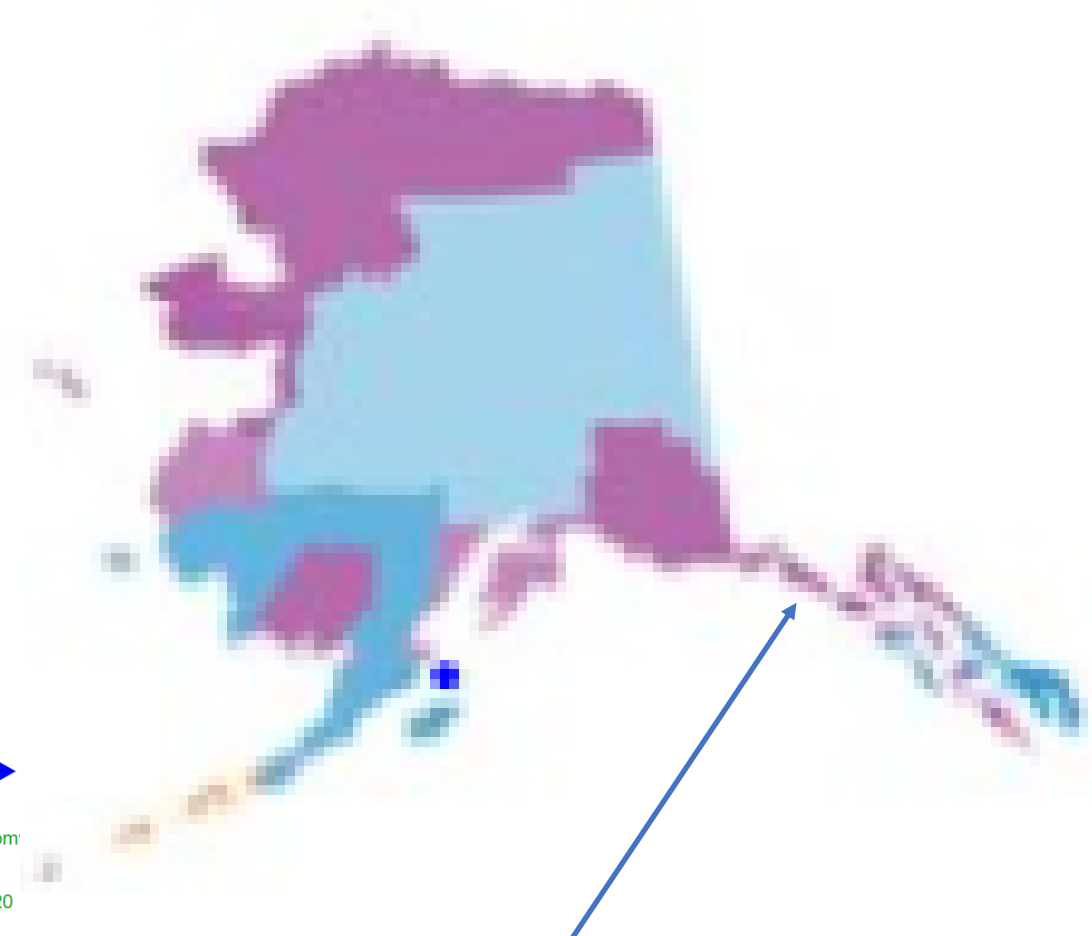
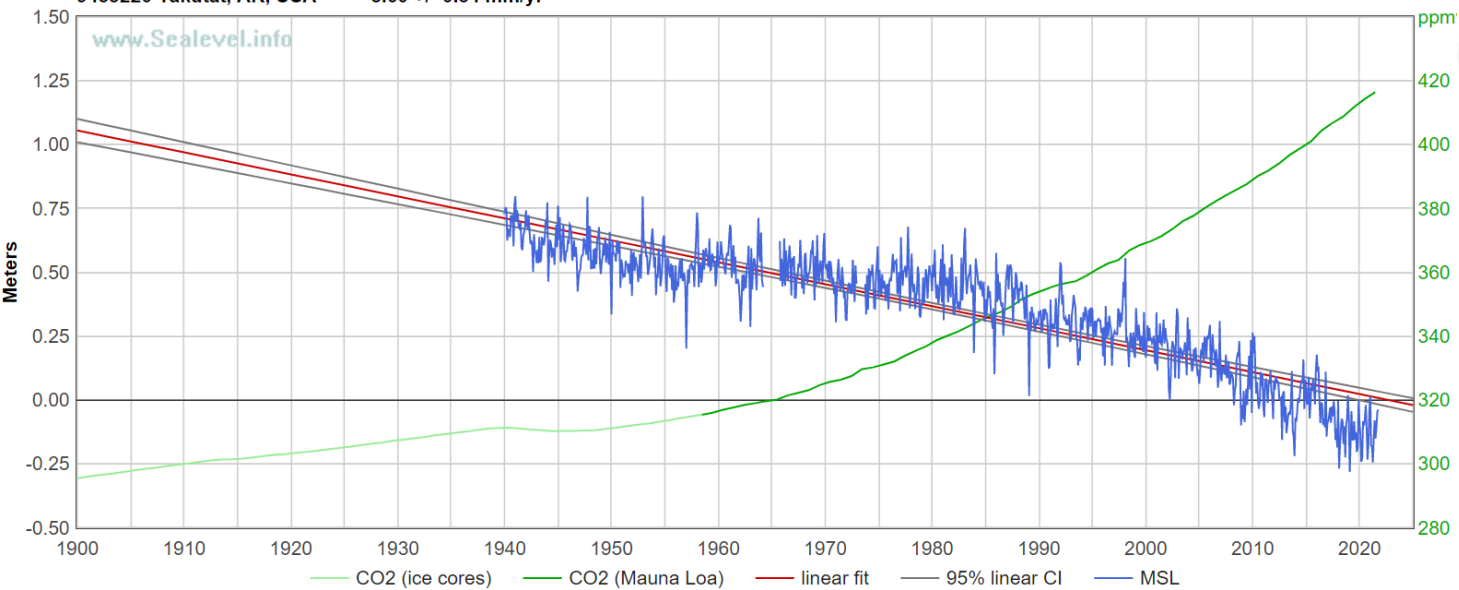


# Sea Level is falling at Yakutat, Alaska.

[Sealevel.info](http://Sealevel.info) → [Data](#) → 9453220

## Mean Sea Level at Yakutat, AK, USA (NOAA [9453220](#), 821-026, PSMSL [445](#))

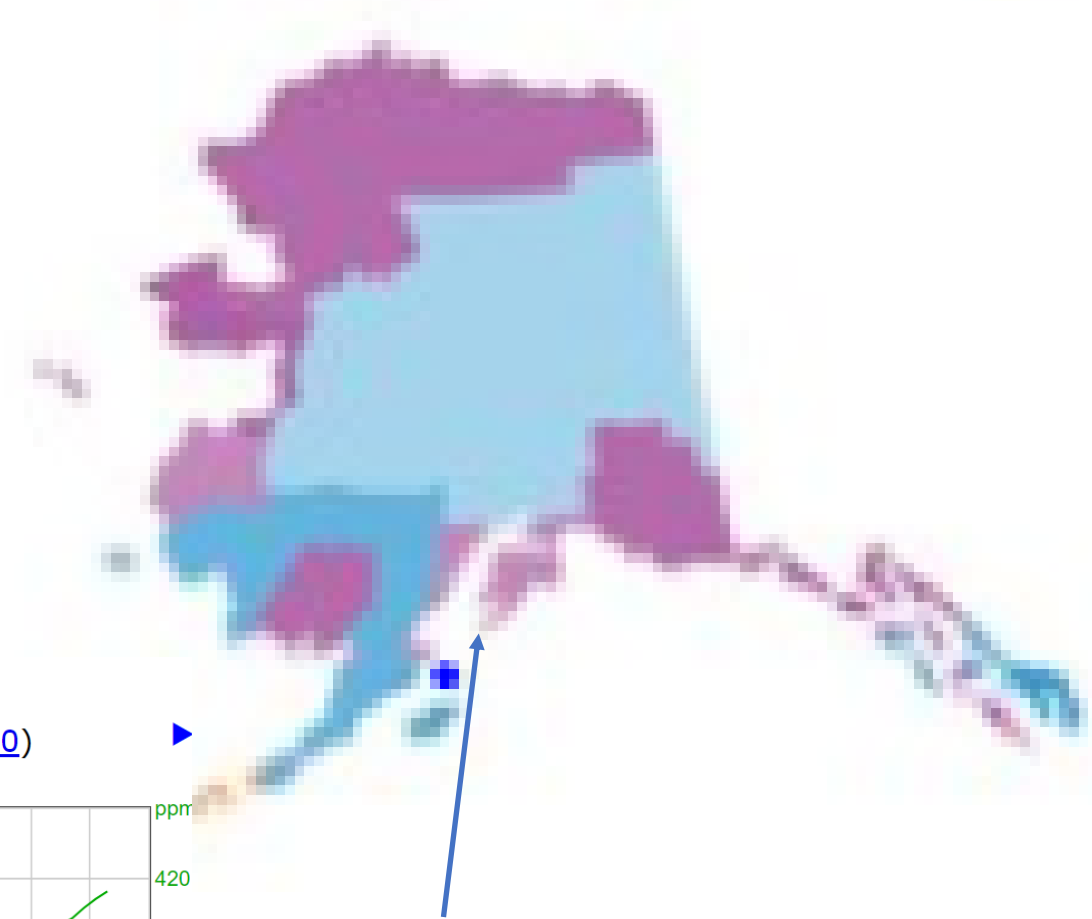
9453220 Yakutat, AK, USA -8.60 +/- 0.54 mm/yr



Yakutat, AK

Sea level rise  
Low threat Very high threat

# Sea Level is falling at Seldovia, Alaska.



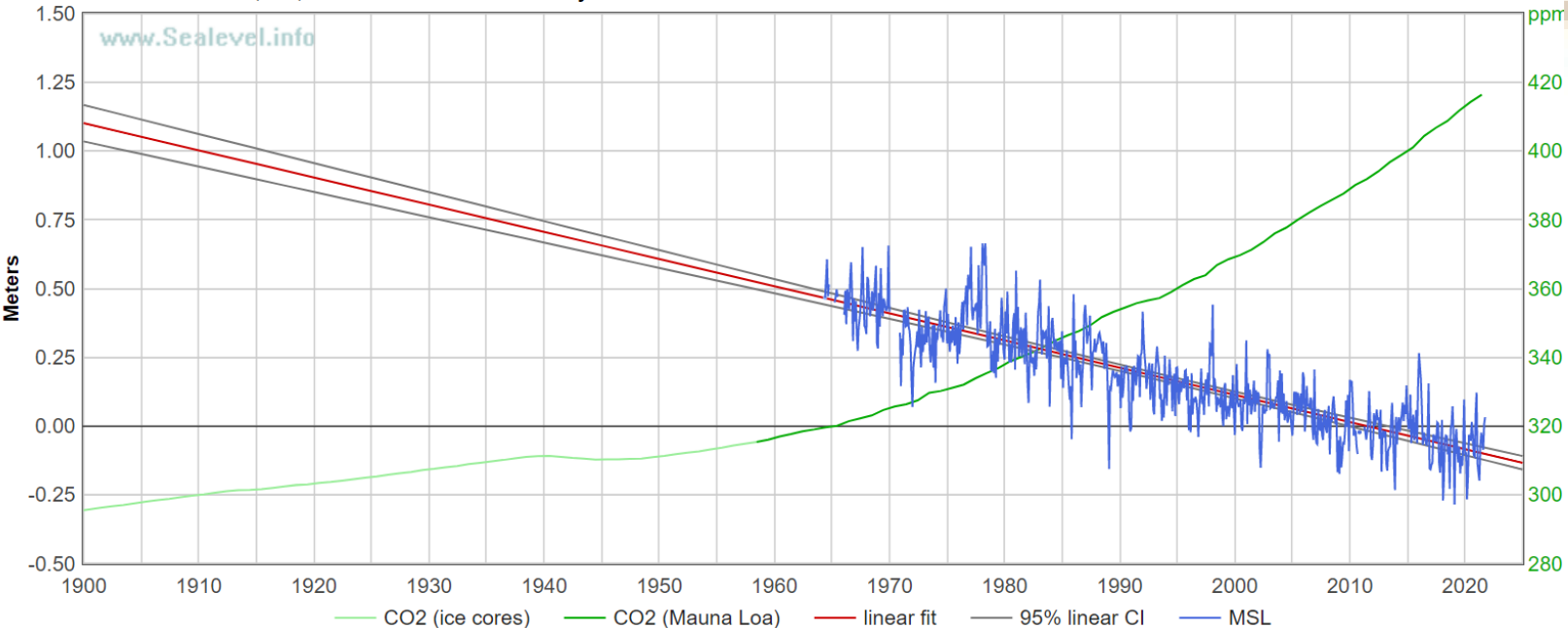
Seldovia, AK

Sea level rise  
Low threat      Very high threat

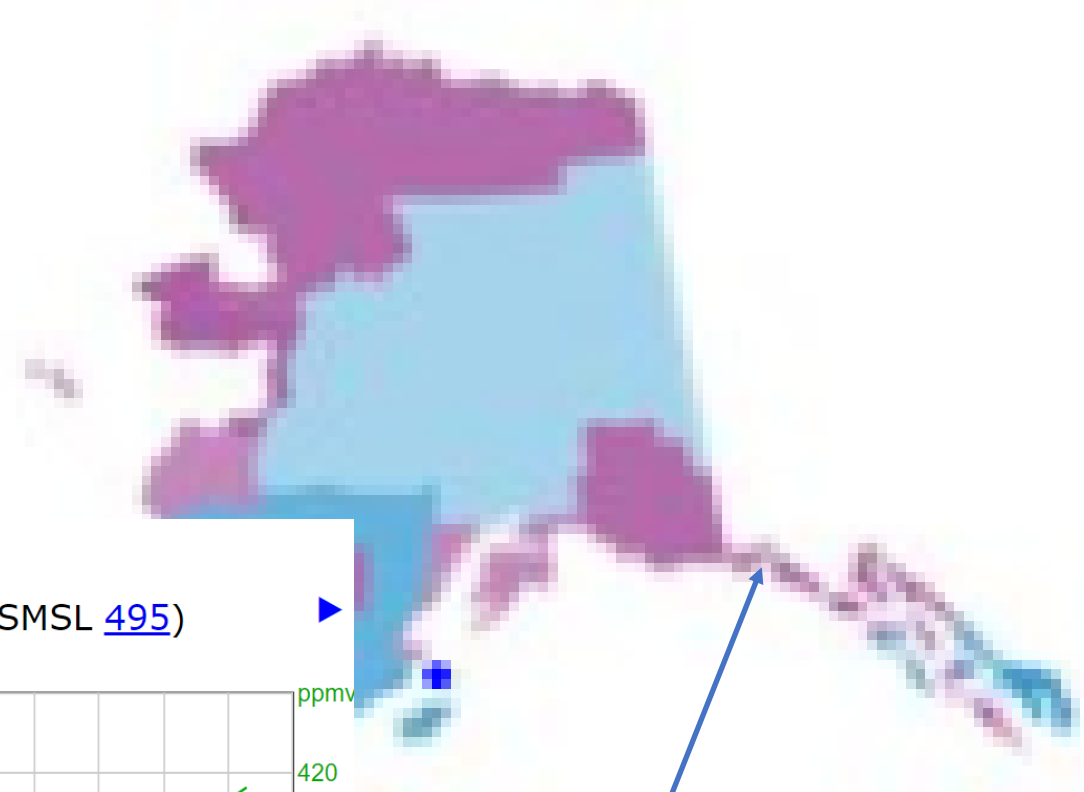
[Sealevel.info](http://Sealevel.info) → [Data](#) → 9455500

## Mean Sea Level at Seldovia, AK, USA (NOAA [9455500](#), 821-015, PSMSL [1070](#))

9455500 Seldovia, AK, USA      -9.88 +/- 0.70 mm/yr



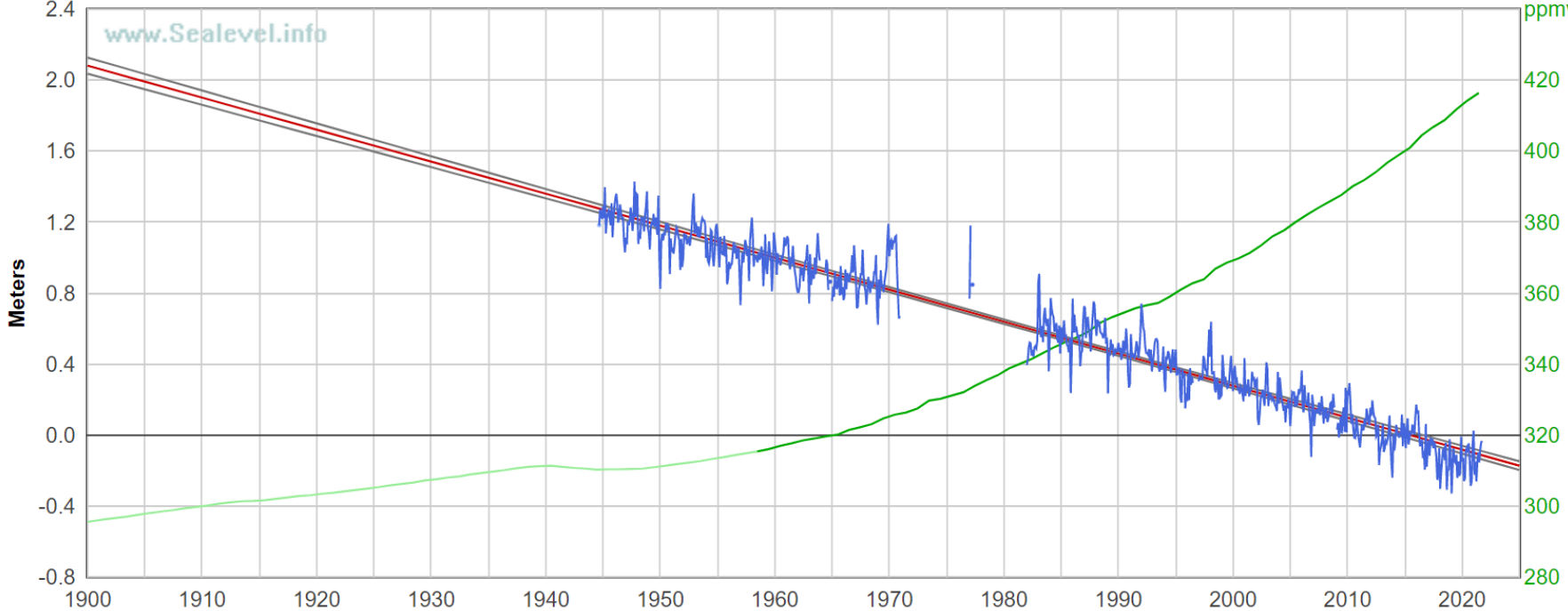
# Sea Level is falling at Skagway , Alaska.



[Sealevel.info](http://Sealevel.info) → [Data](#) → 9452400

## Mean Sea Level at Skagway, AK, USA (NOAA [9452400](#), 821-041, PSMSL [495](#))

9452400 Skagway, AK, USA -18.04 +/- 0.52 mm/yr



Skagway, AK

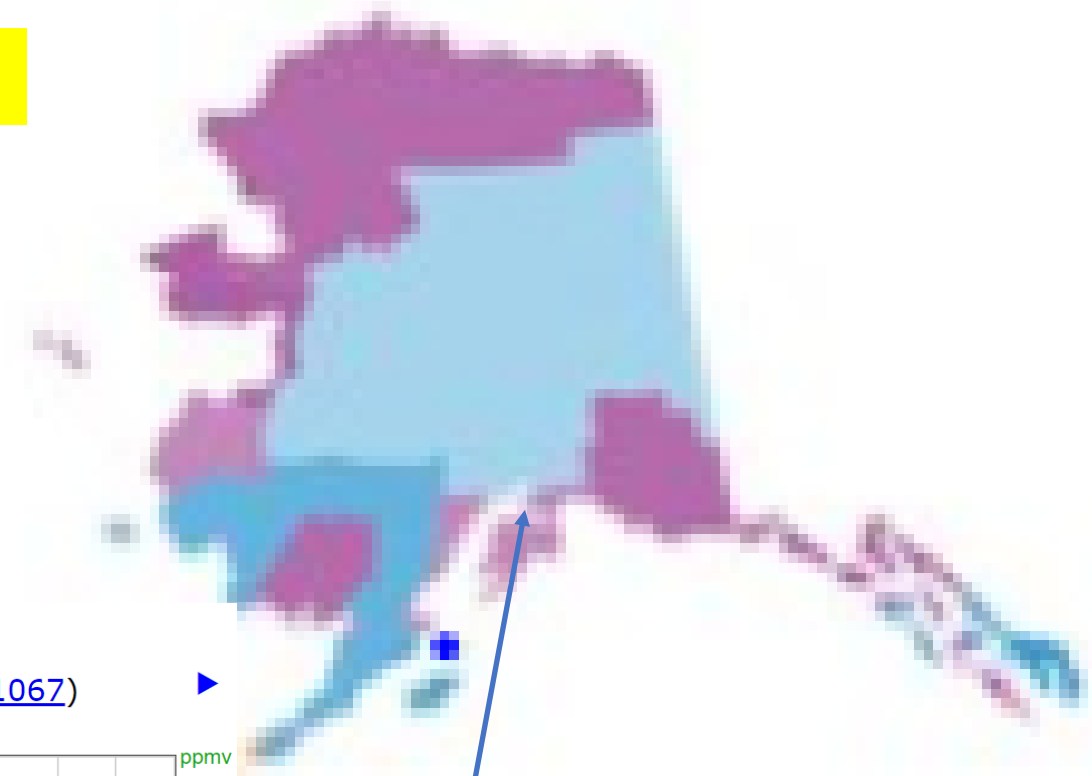
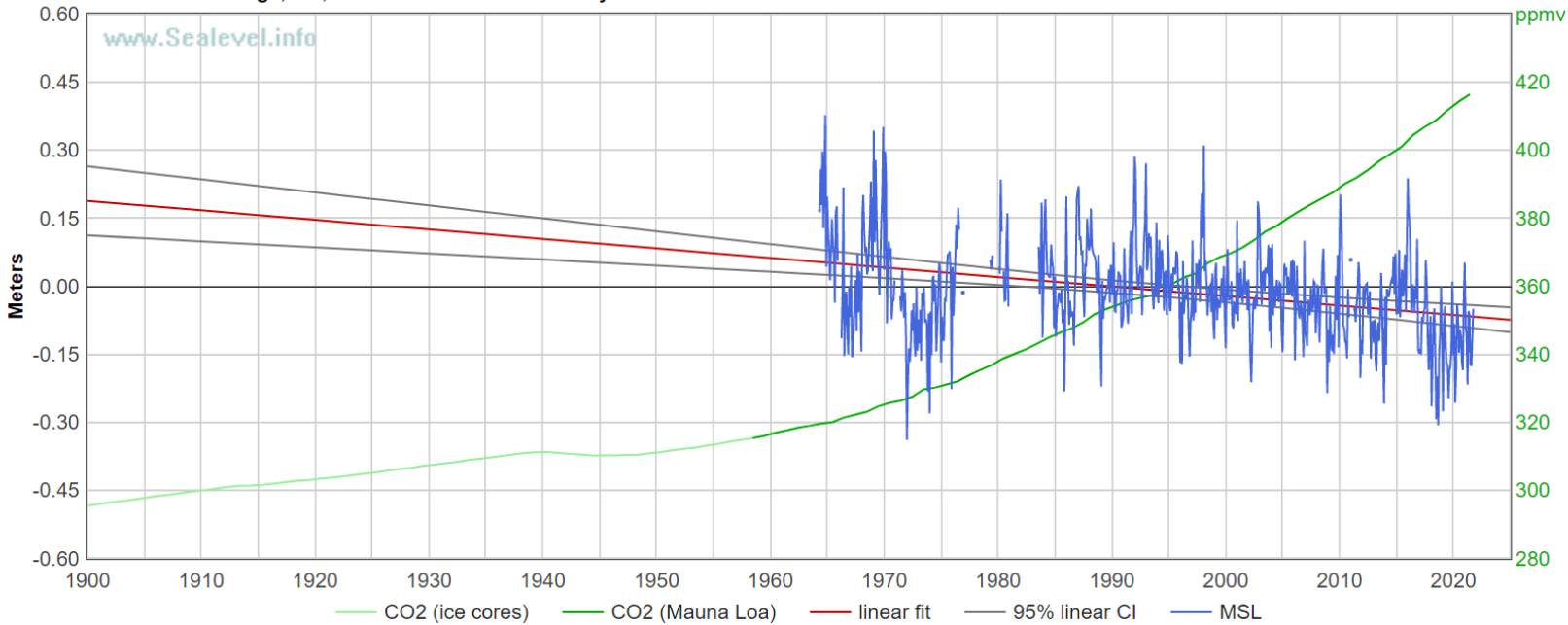
Sea level rise  
Low threat      Very high threat

# Sea Level is falling at Anchorage, Alaska.

[Sealevel.info](http://Sealevel.info) → [Data](#) → 9455920

## Mean Sea Level at Anchorage, AK, USA (NOAA [9455920](#), 821-012, PSMSL [1067](#))

9455920 Anchorage, AK, USA -2.10 +/- 0.79 mm/yr



Anchorage, AK

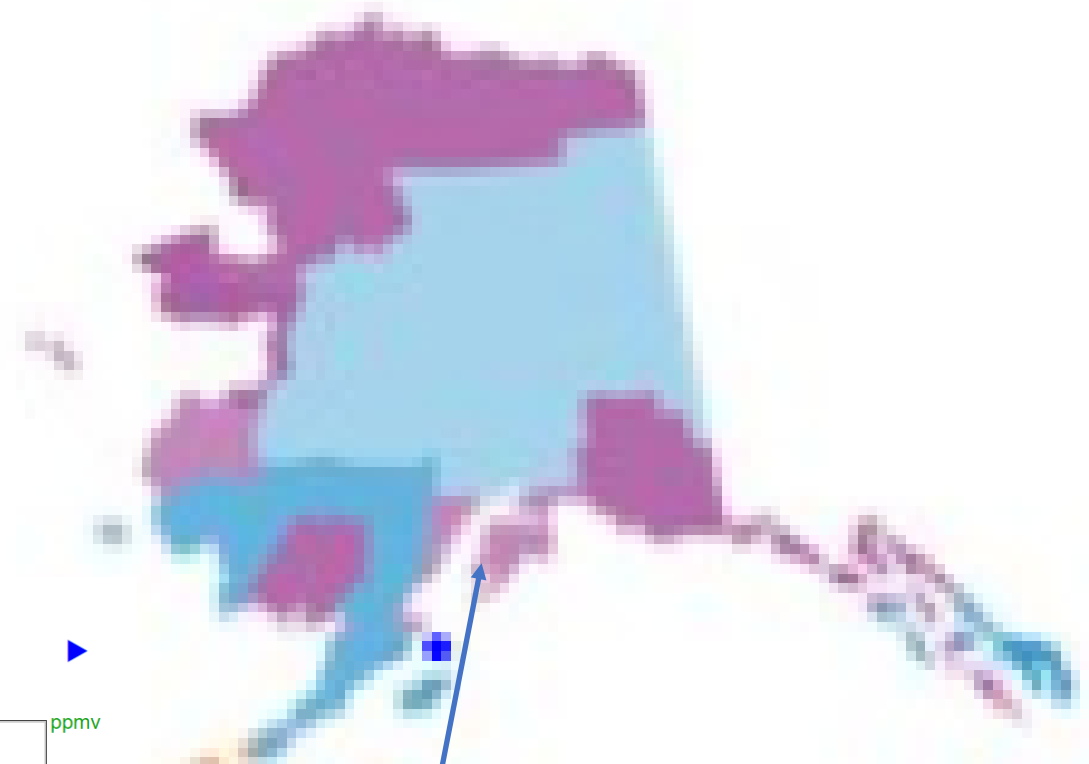
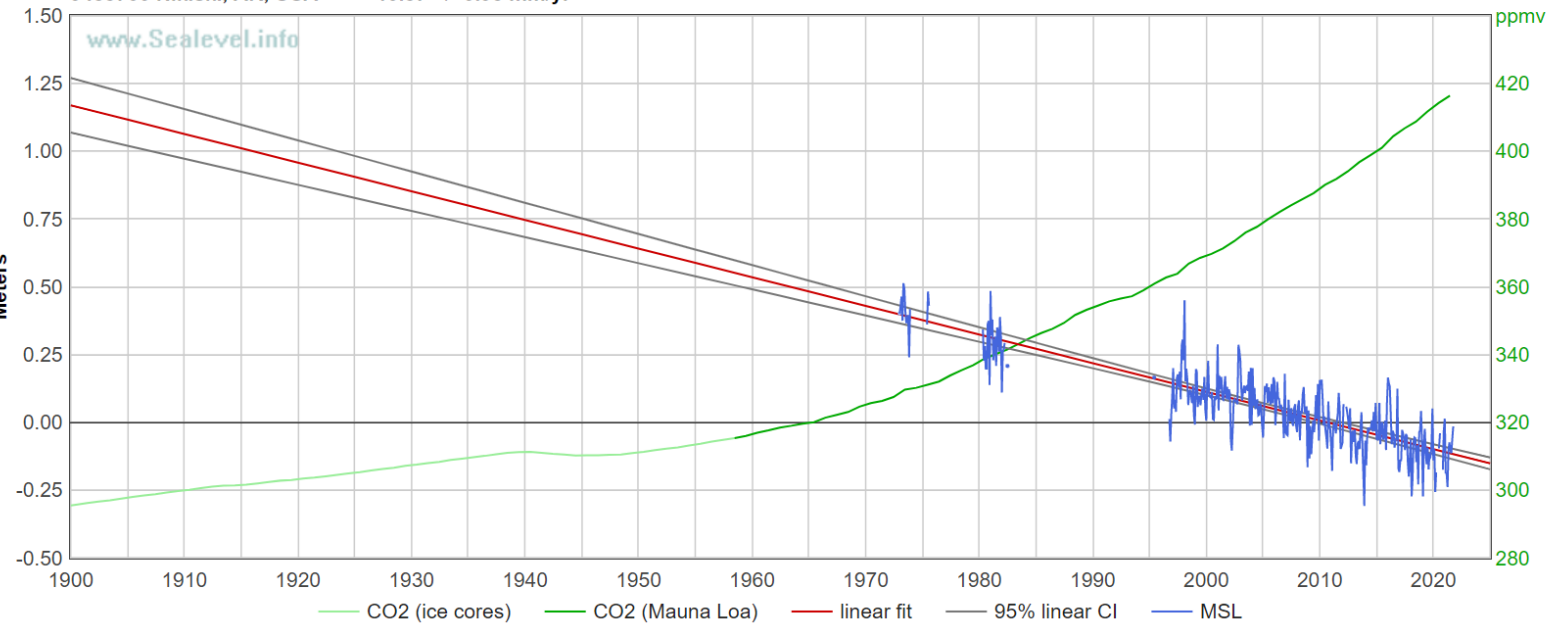
Sea level rise  
Low threat Very high threat

# Sea Level is falling at Nikiski, Alaska.

[Sealevel.info](http://Sealevel.info) → [Data](#) → 9455760

## Mean Sea Level at Nikiski, AK, USA (NOAA [9455760](#), 821-013, PSMSL [1350](#))

9455760 Nikiski, AK, USA -10.57 +/- 0.95 mm/yr



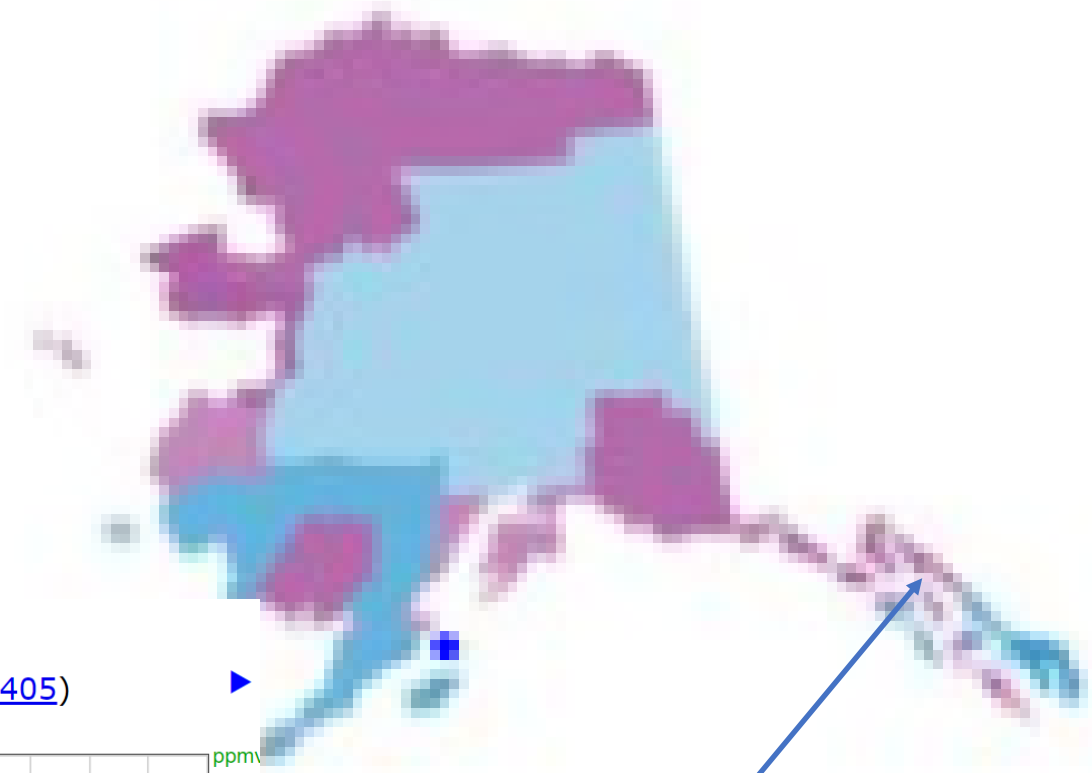
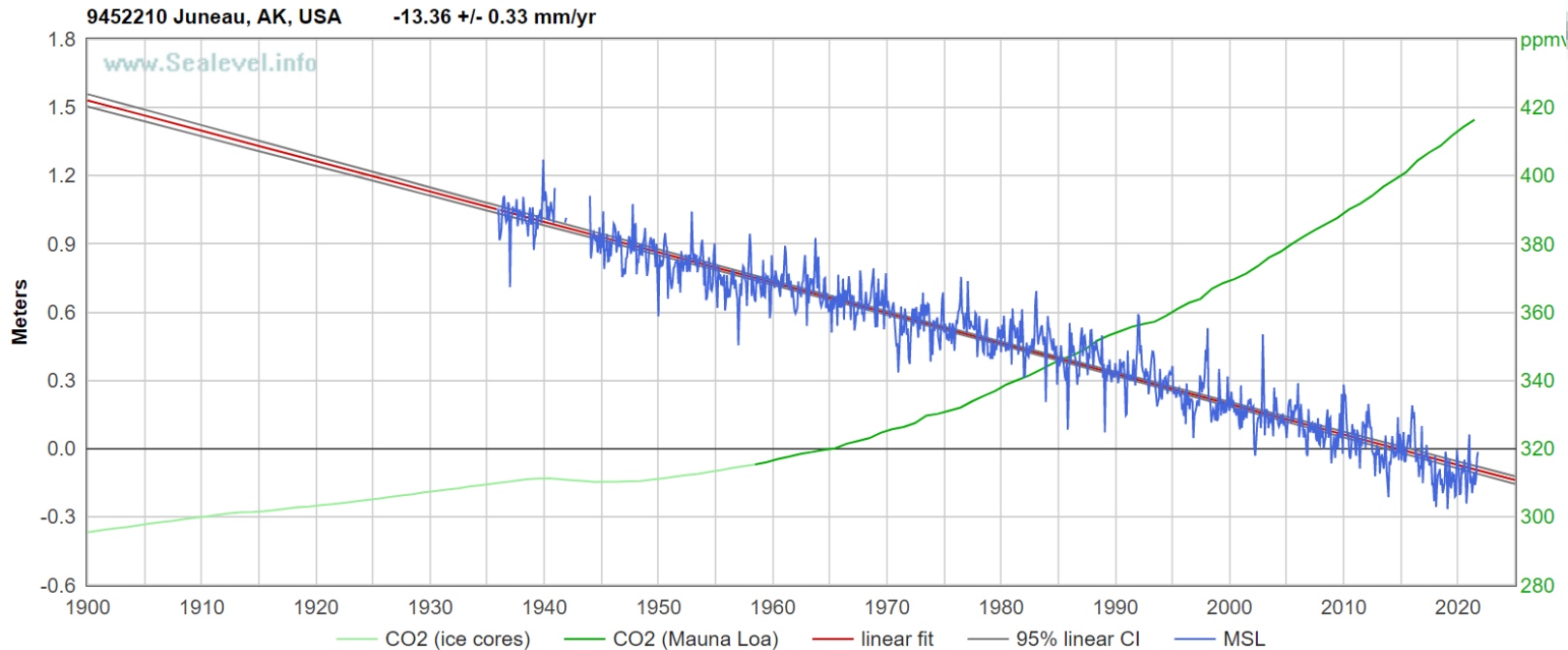
Nikiski, AK

Sea level rise  
Low threat      Very high threat

# Sea Level is falling at Juneau, Alaska.

[Sealevel.info](http://Sealevel.info) → [Data](#) → 9452210

## Mean Sea Level at Juneau, AK, USA (NOAA [9452210](#), 821-044, PSMSL [405](#))



Juneau, AK

Sea level rise  
Low threat Very high threat

Sea Level is falling at Juneau, Nikiski, Anchorage, Yakutat, Seldovia, and Skagway, Alaska.

This means that over almost all of the Gulf of Alaska coastal regions of Alaska, where the majority of the NOAA Tide Gages for Alaska are located, Sea Levels are falling substantially.

AARP could not be more wrong in their sea level rise map for Alaska.

AARP's claims of sea level rise in Alaska are Fake News.



It's obvious that AARP's writers have not had a first course in Geology or Earth Science, not the slightest ability to look up information which is plainly available in 101 level course work, or through Internet Search.



**Risk:** Rising ozone levels

**Impact:** Increased lung disease

It's well known that smoking rates in America have been declining — from nearly 21 percent of adults in 2005 to 14 percent in 2019, according to the CDC. And so it would stand to reason that lung disease would also be declining. That may be true in many instances, but not for emphysema; rates of this breath-stealing ailment have remained generally steady, the American Lung Association says.

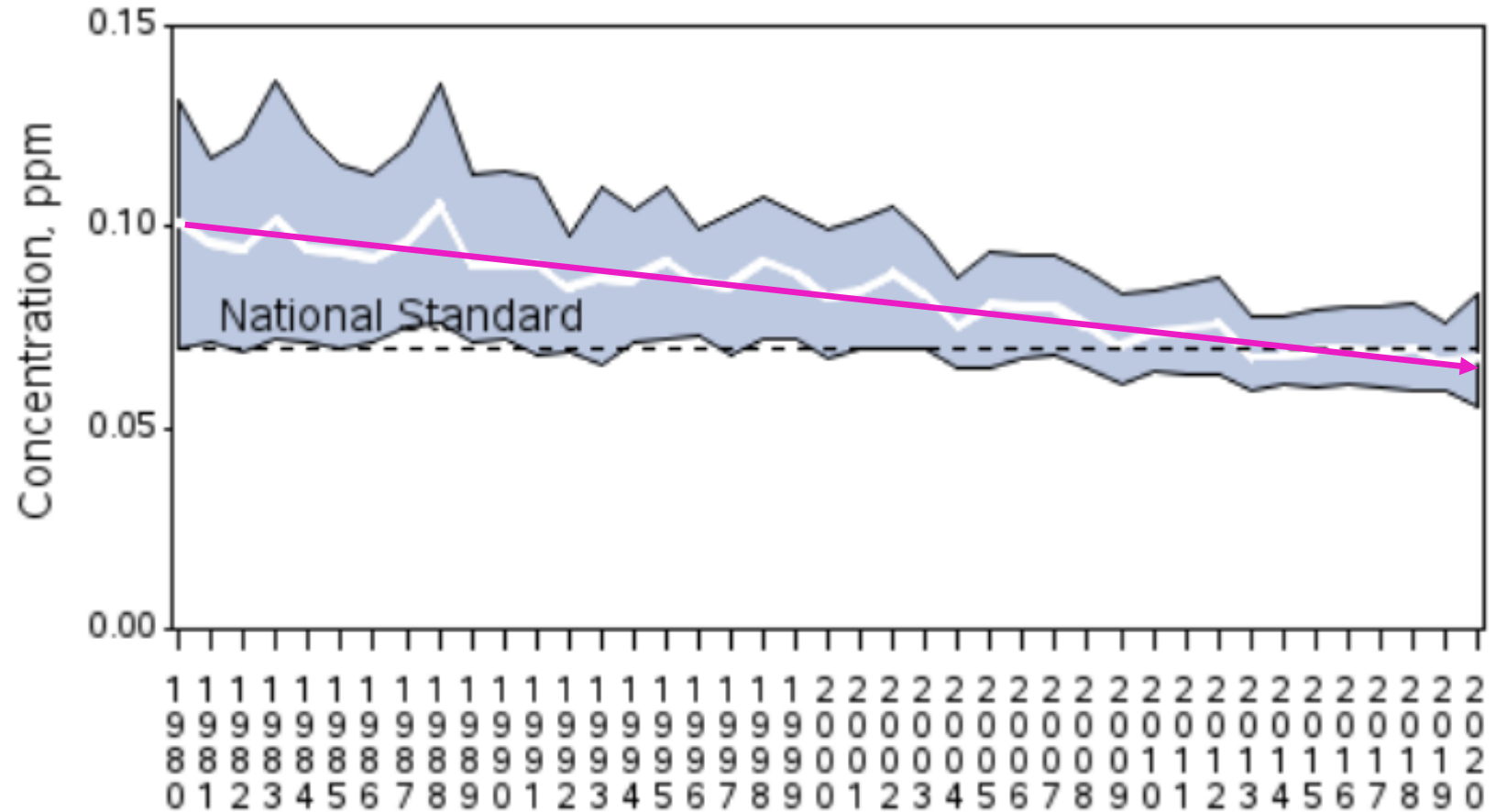
One culprit, scientists surmise, is rising levels of ground ozone, an invisible gas associated with automobile exhaust and factory emissions. The link to climate change is this: Heat and sunlight convert pollutants into ozone. (This is different from the Earth's "ozone layer," which is 9 to 18 miles above the surface. That atmospheric ozone protects us against radiation from the sun, and is a good thing.)

# Ozone Air Quality, 1980 - 2020

(Annual 4th Maximum of Daily Max 8-Hour Average)  
National Trend based on 188 Sites

“One culprit, scientists surmise, is rising levels of ground ozone...”

The EPA shows that surface Ozone is falling!  
Fell 33%, EPA data.



1980 to 2020 : 33% decrease in National Average

This chart is emblematic of AARP's ignorance of this subject.

**Risk:** Changing seasonal climates

**Impact:** Tougher gardening conditions

A changing climate also alters the geographic distribution of garden pests. Patty Glick, author of *The Gardener's Guide to Global Warming: Challenges and Solutions*, once grew bountiful roses in Seattle, but that changed when aphids moved into her garden. “I decided I wasn't going to grow roses anymore because I didn't want to spray,” she says.



[Review](#) | [Open Access](#) | [Published: 23 December 2013](#)

# Cereal aphid movement: general principles and simulation modelling

[Hazel R Parry](#) 

<https://movementecologyjournal.biomedcentral.com/articles/10.1186/2051-3933-1-14>

There's lots of information on the movement of aphids in this article

Aphid movement is determined by the flight characteristics of the aphid species. Aphid movement is also determined by the local weather conditions at the time the aphids take wing.

Conditions favoring movement over large distances depend on the strength, height, and duration of the thermals, whether or not there is a capping inversion, and the downwind speed of the thermals.

**Nothing in this article to indicates or suggests that global climate change or the slight warming seen in recent years influences the migration of aphids.**

Risk: Hotter climate

Impact: Heat-related ailments

Yes, Los Angeles is known for its dry heat. But in September 2020, L.A. County recorded its highest temperature on record — 121 degrees — a few weeks after California's Death Valley reached what might be the highest temperature ever recorded on Earth: 130 degrees

“California's Death Valley reached what might be the highest temperature ever recorded on Earth: 130 degrees”

<https://www.ncdc.noaa.gov/extremes/scec/records>

California	Maximum Temperature	134°F	July 10, 1913	Greenland Ranch
California	Minimum Temperature	-45°F	Jan 20, 1937	Boca
California	24-Hour Precipitation 	25.83 in.	Jan 22 - 23, 1943	Hoeges Camp
California	24-Hour Snowfall	67 in.	Jan 5, 1982	Echo Summit Sierra at Tahoe
California	Snow Depth	451 in.	March 11, 1911	Tamarack
California	Wind Gust	199 mph	Feb 20, 2017	Alpine Summit (Ward Mt)

AARP is Wrong Again

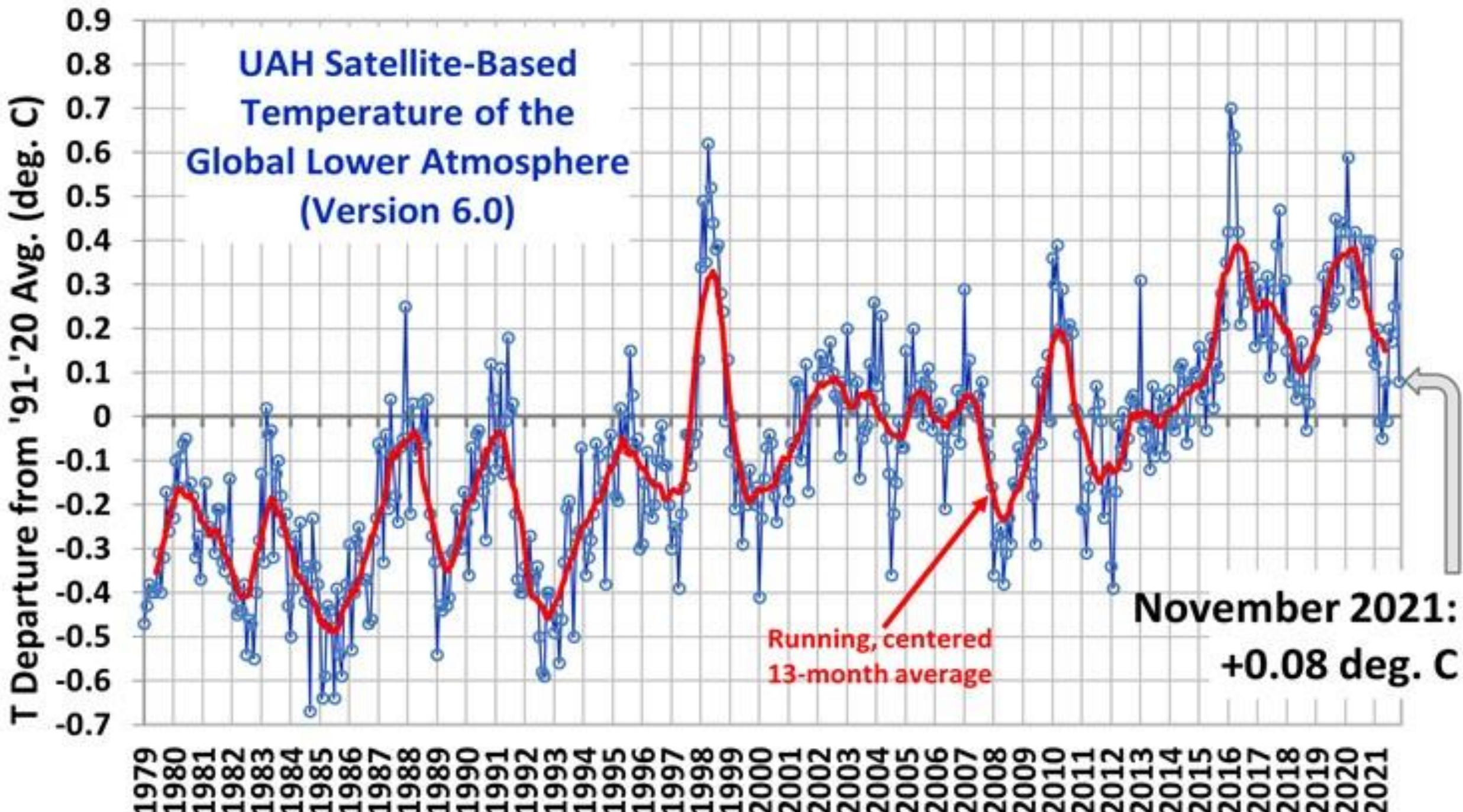
The extreme maximum surface temperature was set at Greenland Ranch, Death Valley National Park 134F recorded 10 Jul 1913.

**This record is over 100 years old**

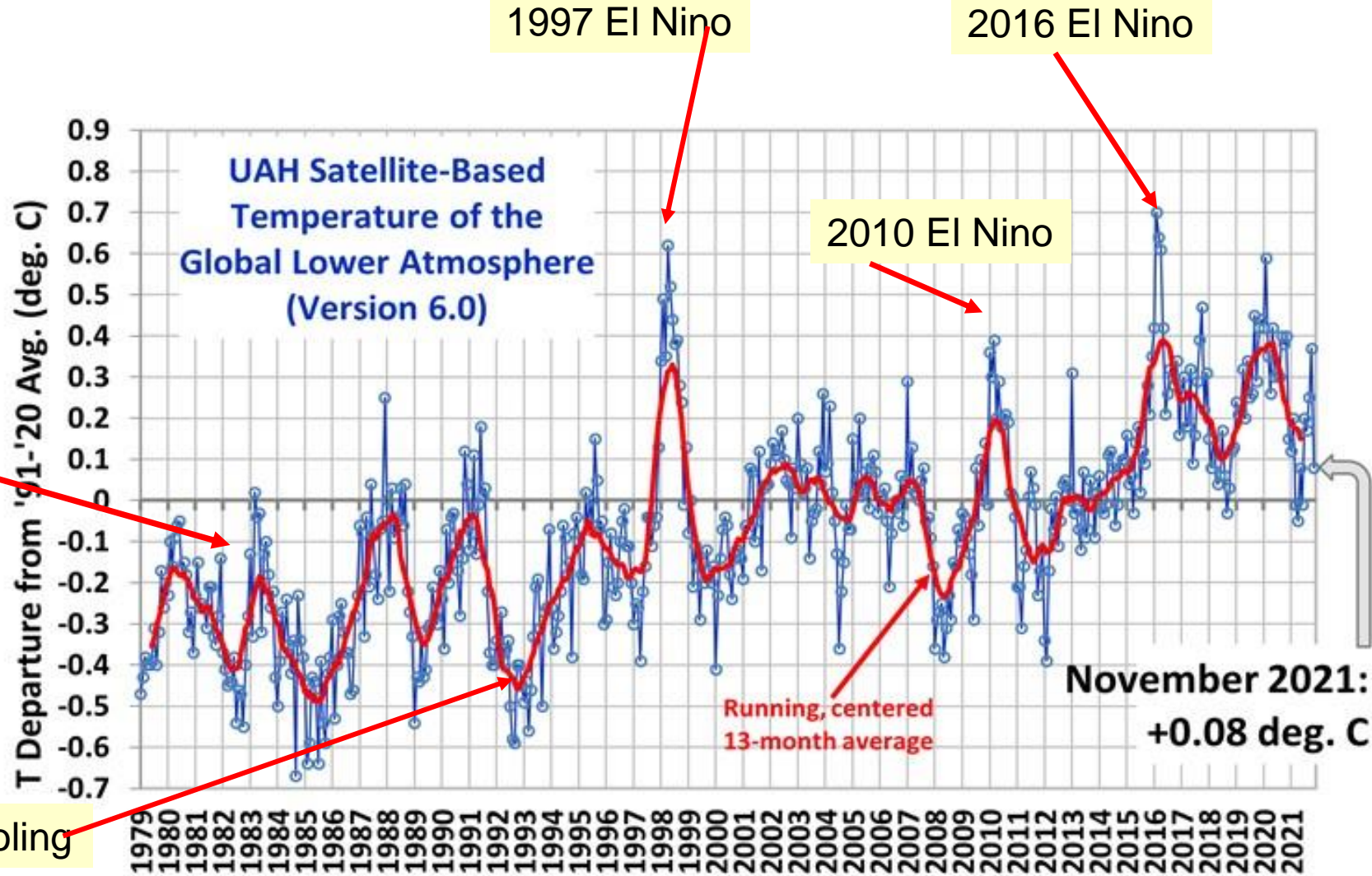
Let's examine this claim from AARP:

Scientists have been measuring air temperature since the 1880s, and **2020 was Earth's second hottest of the past 140 years**, according to the National Oceanic and Atmospheric Administration.





This is the satellite-measured global temperature of the lower troposphere, “the Greenhouse,” since 1979



The linear warming trend since January 1979 is +0.14 C/decade (+0.12 C/decade over the global-averaged oceans, and +0.18 C/decade over global-averaged land).

An important problem with recorded surface temperatures is the “Urban Heat Island” (UHI) Effect.

Right, an illustrative example from California:  
Goodridge, J., (1996) Comments on Regional Simulations of Greenhouse Warming Including Natural Variability. Bulletin of the American Meteorological Society. Vol.77, p.188.

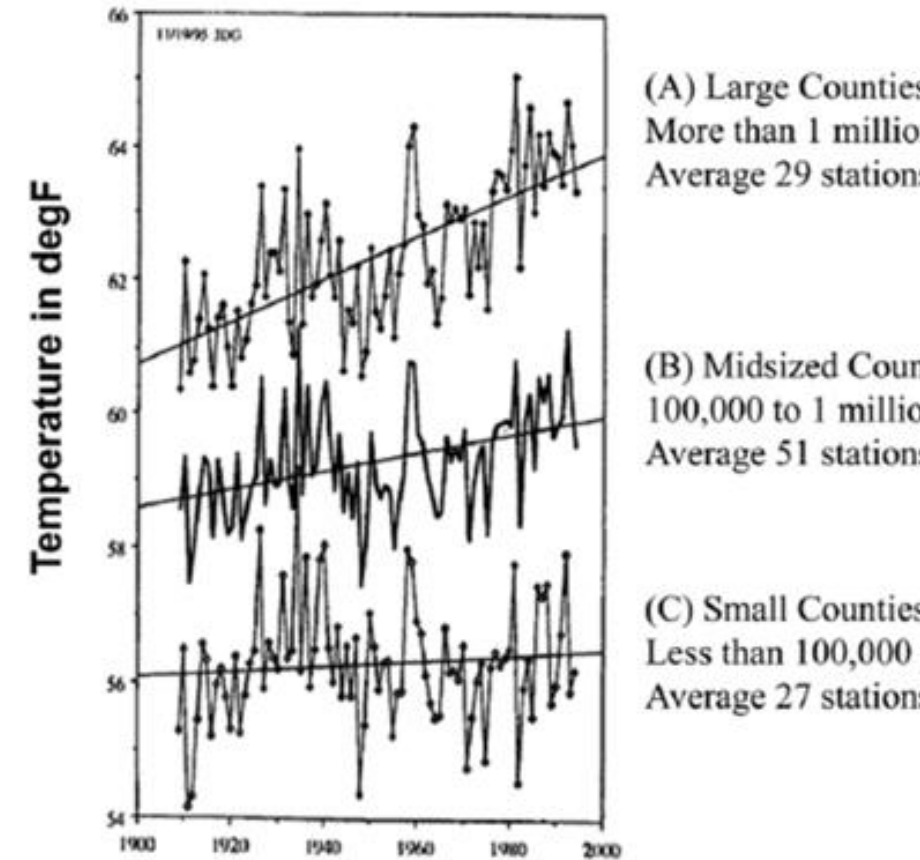
**High population counties**, top curve, have the hottest temperatures and the strongest rate of temperature increase.

**Small population counties**, bottom curve, have cool temperatures, and the rate of temperature increase is lowest.

“Human-caused CO2 fueled global warming” is mostly driven by the UHI effect, at least in California, but this is a universal problem.

## Urban Heat Island Effect

Temperature Trends at 107 Californian Stations 1909 to 1999 Stratified by 1990 population of the county where station is located

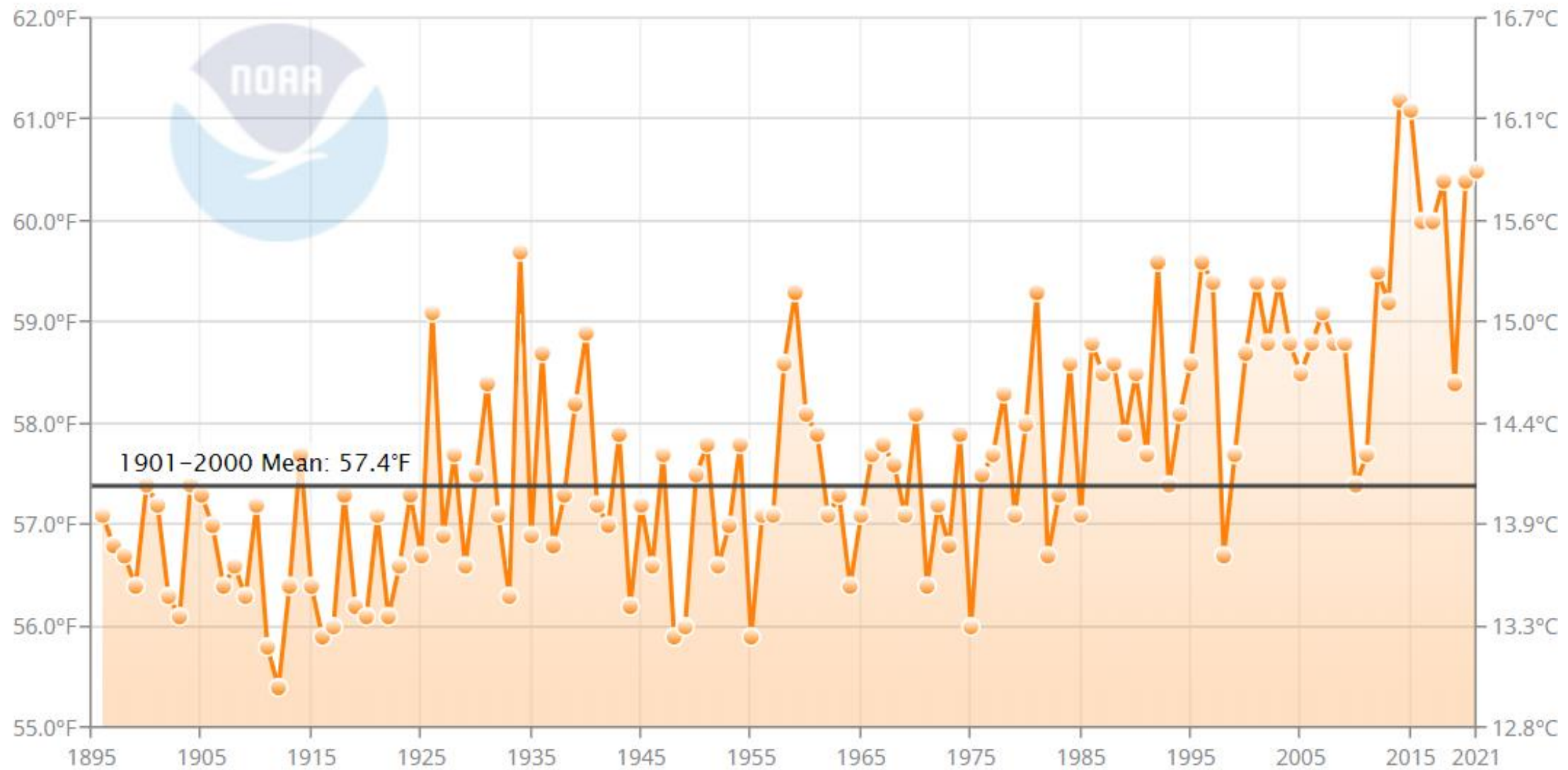


A demonstration of the 'urban heat island' effect. Observed (surface) temperature trends from California stations are shown to depend on population density. (A) Counties with more than 1 million people, (B) 100k to 1 million, (C) less than 100k people, respectively [Goodridge 1996]. Note that all three [High, Medium, and Low density] show a temperature rise up to 1940, followed by a pronounced

Let's examine some data from California to see how AARP's claims that  
  
(last year) there was **“...a record-breaking heat wave...”**

There's no 2020 "Record Breaking Heat Wave" in California's data from NOAA.

### California Average Temperature December–November



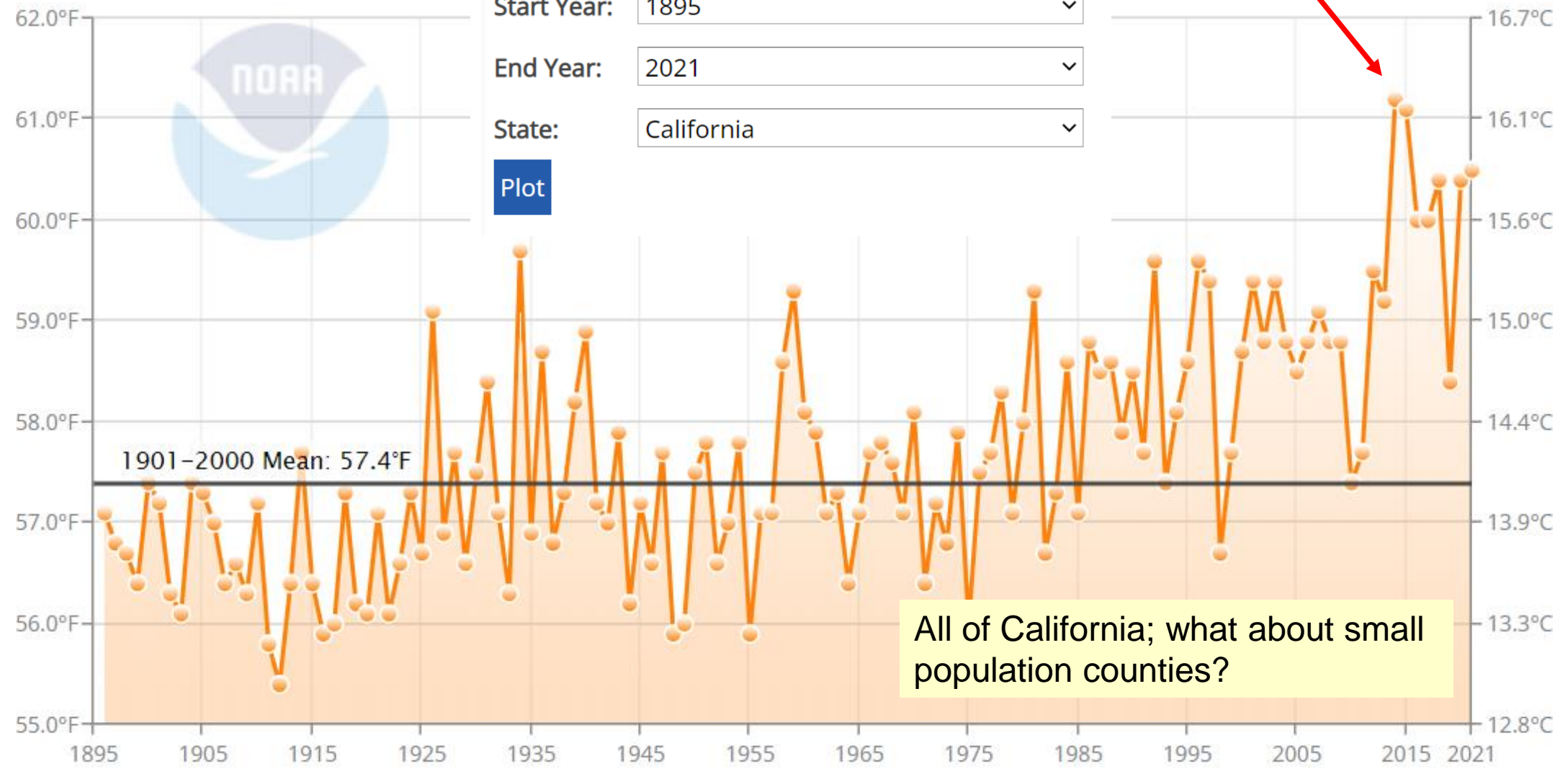
The record-breaking heat seems to be in 2015-16, during that El Nino.

### California Average Temperature December–November



Time Scale: 12-Month  
Month: November  
Start Year: 1895  
End Year: 2021  
State: California

Plot



All of California; what about small population counties?



### California Counties

Recall that the small population counties have lowest temperatures and lowest rates of Urban Heat Island-induced warming.

Let's look at temperature history in the small population counties of **Alpine, Sierra and Modoc.**

# No 2020 "Record-Breaking" heat wave in Alpine County

Average Temperature

Time Scale:

Month:

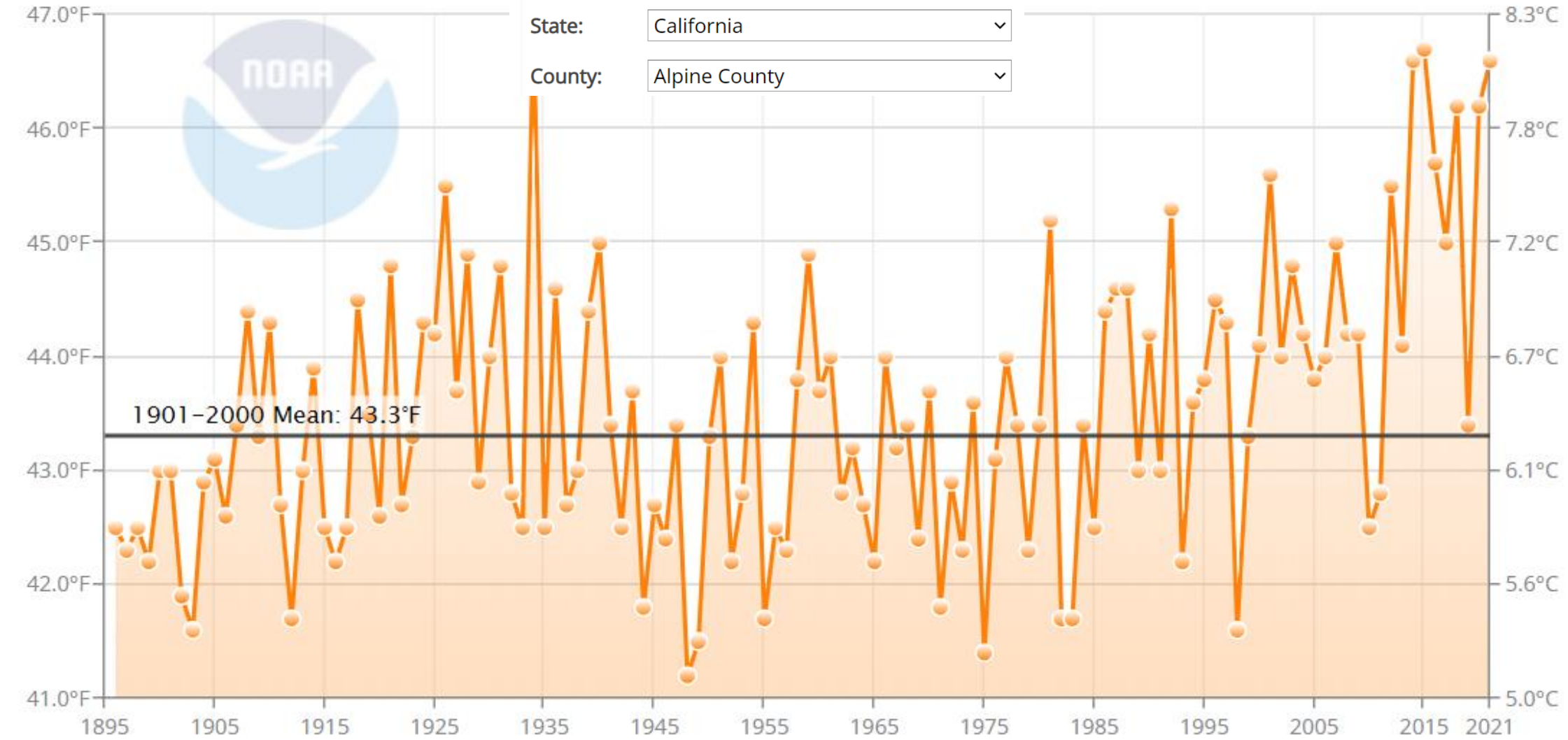
Start Year:

End Year:

State:

County:

## Alpine County, California Average Temperature December–November

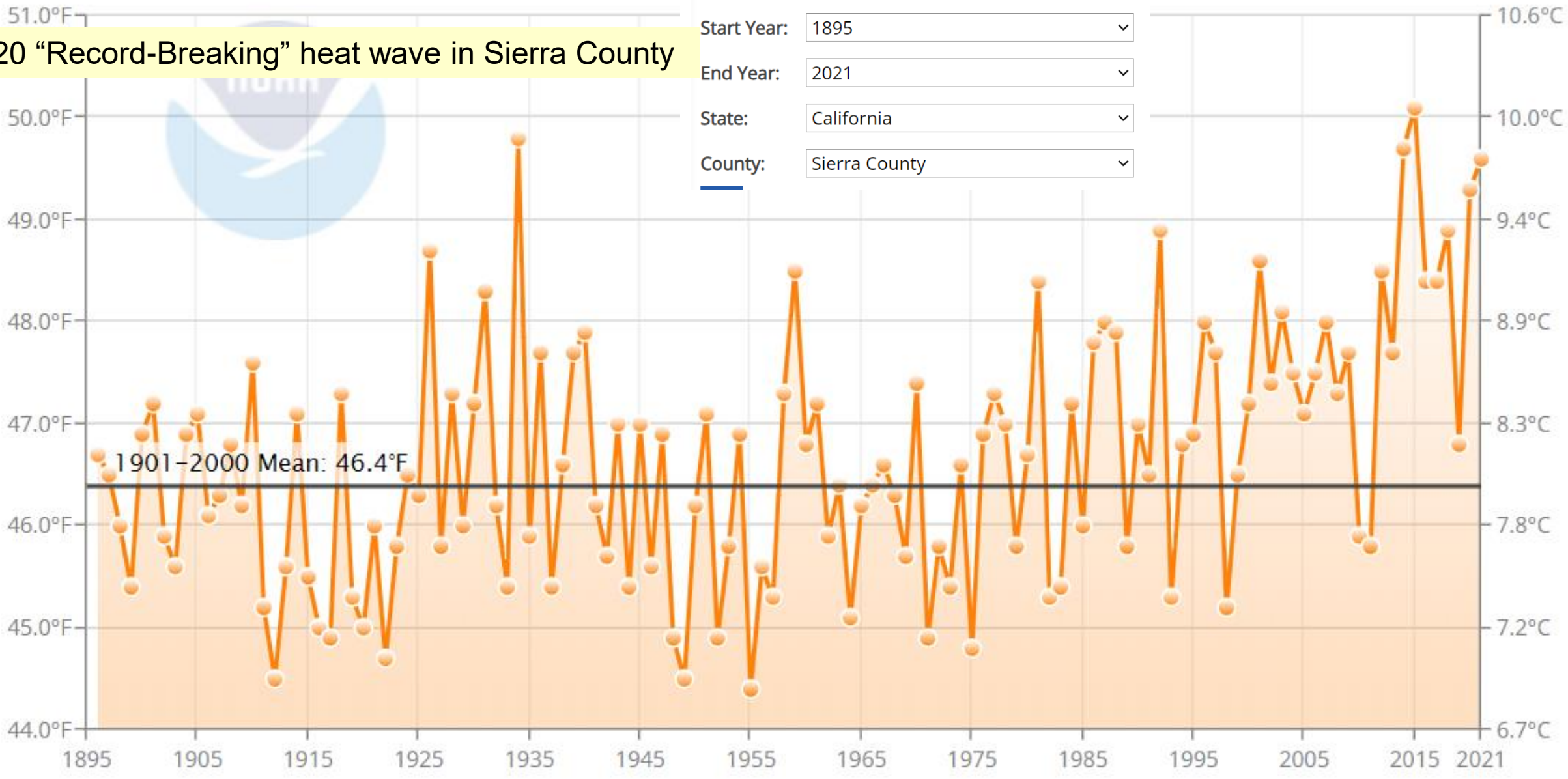




# Sierra County, California Average Temperature December–November

Parameter: Average Temperature  
Time Scale: 12-Month  
Month: November  
Start Year: 1895  
End Year: 2021  
State: California  
County: Sierra County

No 2020 "Record-Breaking" heat wave in Sierra County



# Modoc County, California Average Temperature December–November

Parameter:

Time Scale:

Month:

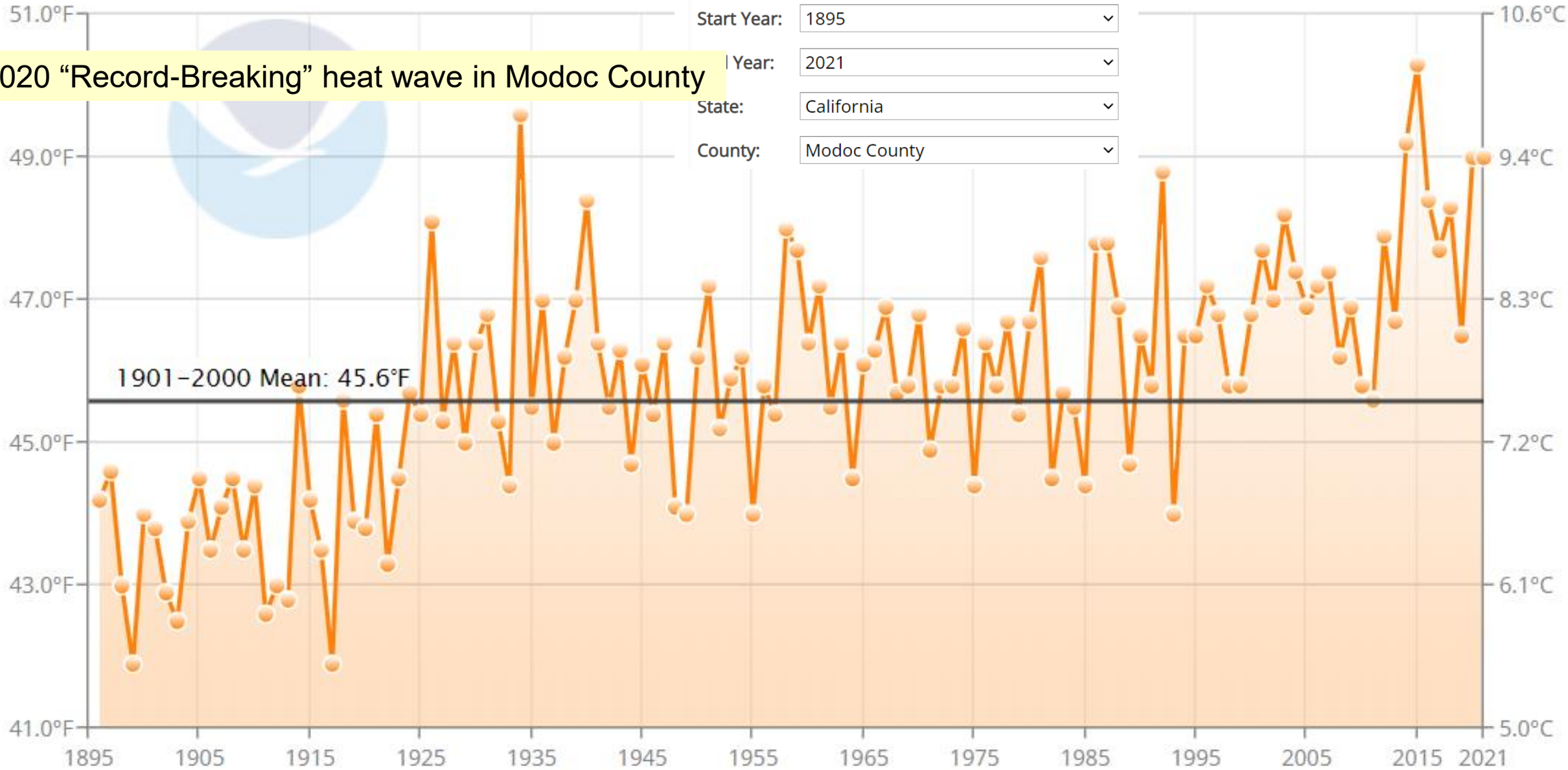
Start Year:

End Year:

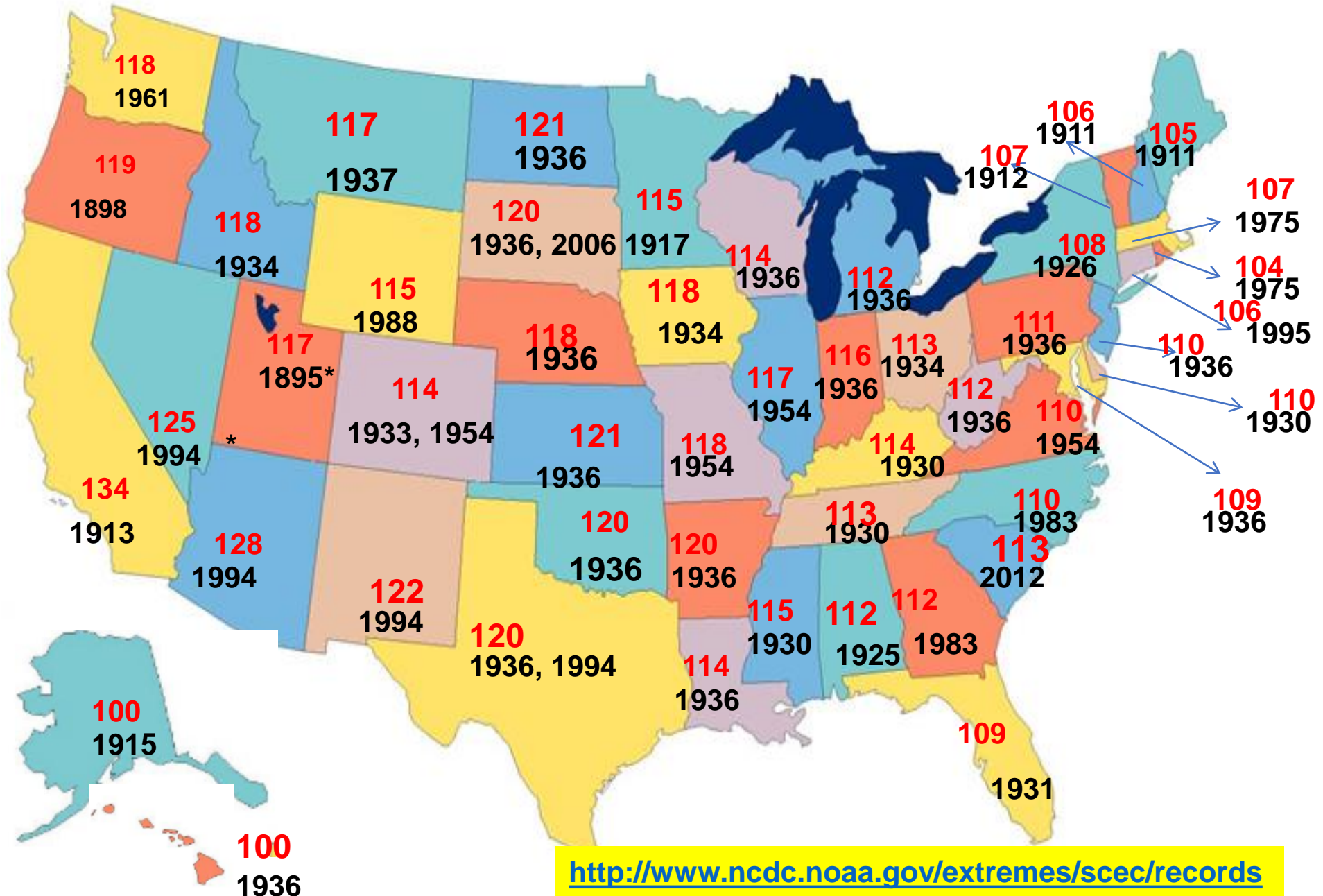
State:

County:

No 2020 “Record-Breaking” heat wave in Modoc County



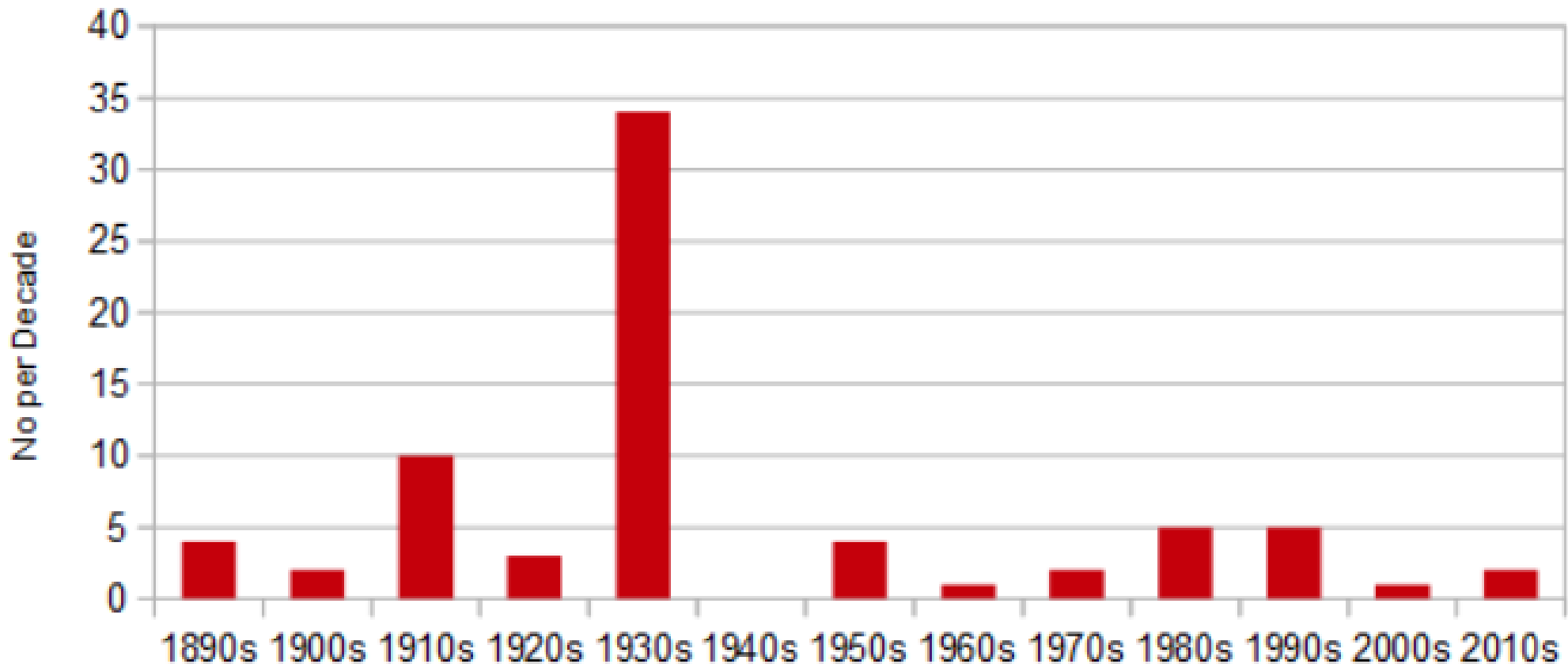
# US. Record Maximum Temperature F by State and Year



This raw data speaks for itself — the United States was hotter in the past. According to NOAA's own data, of the 50 U.S. state all-time record high temperatures, 23 were set during the 1930s, while 36 occurred prior to 1960.

## US State All Time Temperature Records (Incl Ties)

### Daily Maximum Temperature



<https://electroverse.net/highest-u-s-temperatures-on-record-by-state/>

Anthony Watts and Roger Pielke, Sr. crowd-sourced an audit of USHCN stations and compared each with the NWS' own quality rating.

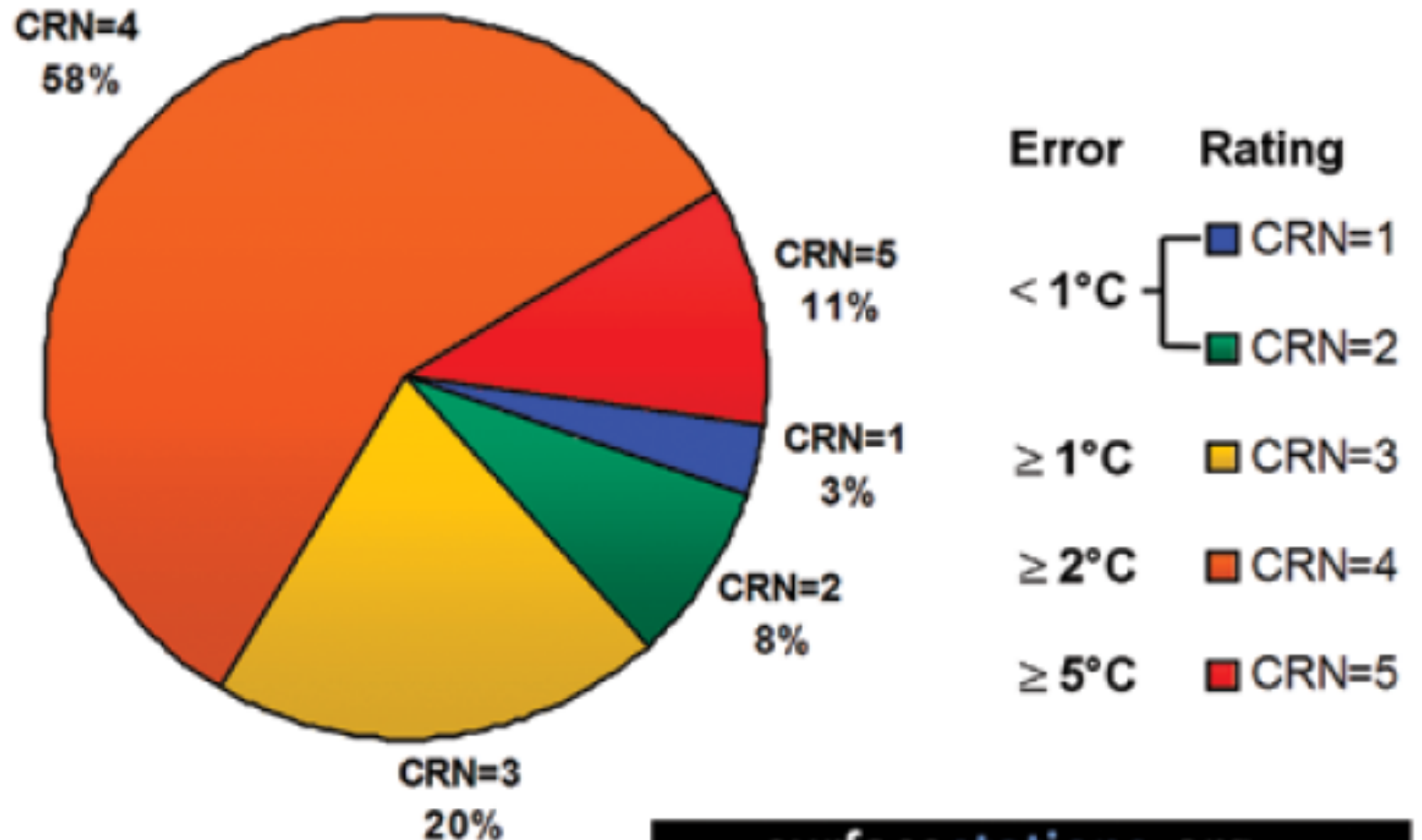
Results were published at **SurfaceStations.org**.

Only 11% of stations met the NWS criteria for having accuracies of less than 1C

Another 11% had accuracies greater than 5C!

How can we say we have reliable surface temperatures when 69% of USHCN stations have errors of 1C to 5C?

## USHCN - Station Site Quality by Rating



USHCN - 70% surveyed as of 2/11/09

**surfacestations.org**

A resource for climate station records and surveys

**Figure 27.** Most of the surveyed temperature stations in the U.S. fall into categories that mean they are unreliable. Only stations in CRN=1 and CRN=2 – 11 percent of all stations – are reliable.

# Analysis of USHCN Station Visits

Most USHCN stations do not meet NOAA'S own established standards.

11%, of stations meet the standards, a SMALL minority

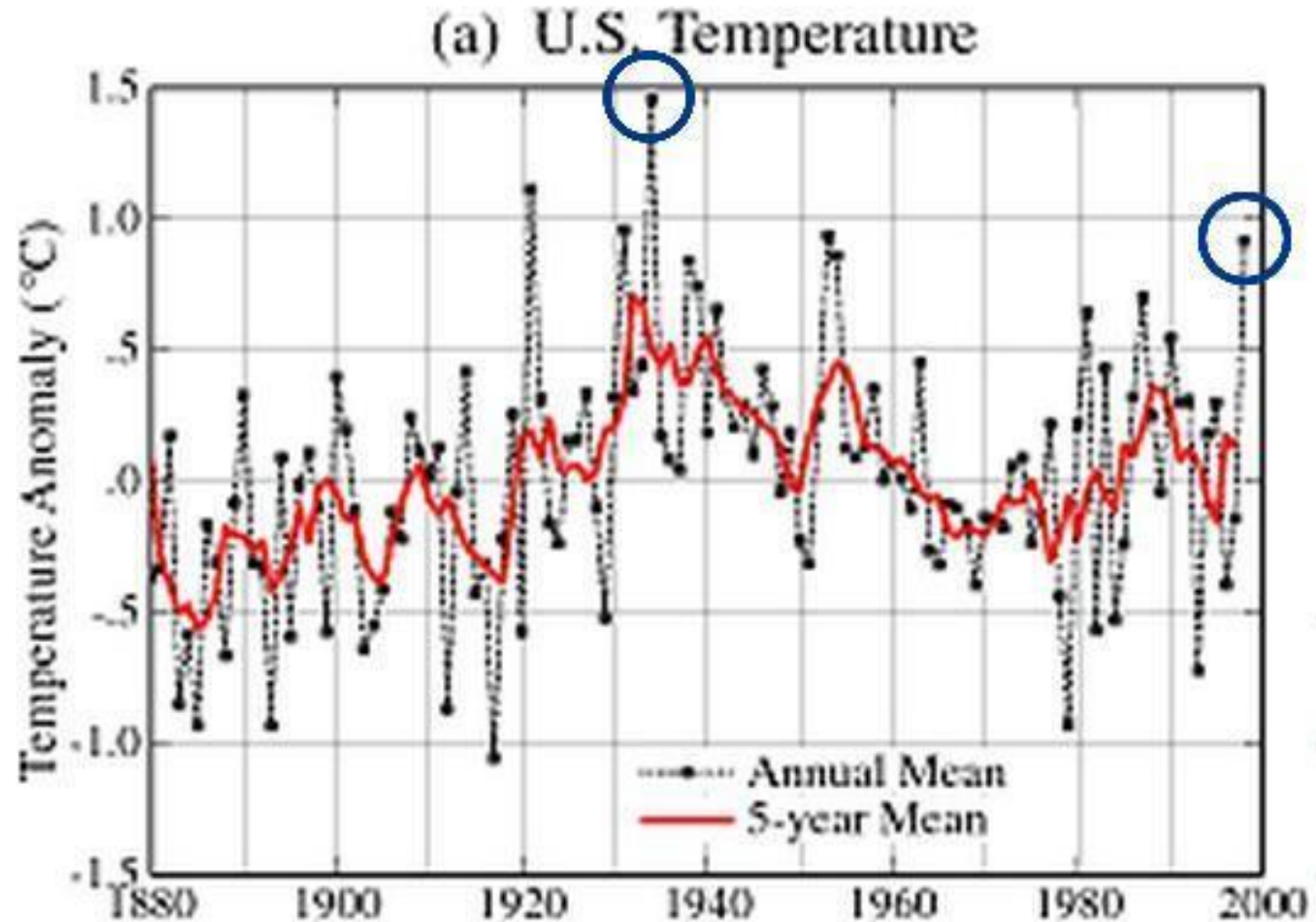
20% of USHCN stations have >1C error

58% of USHCN Stations have >2C error

11% of USHCH Stations have >5C error

**Is the US Surface Temperature record reliable when most stations have  $\geq 2C$  Error?**

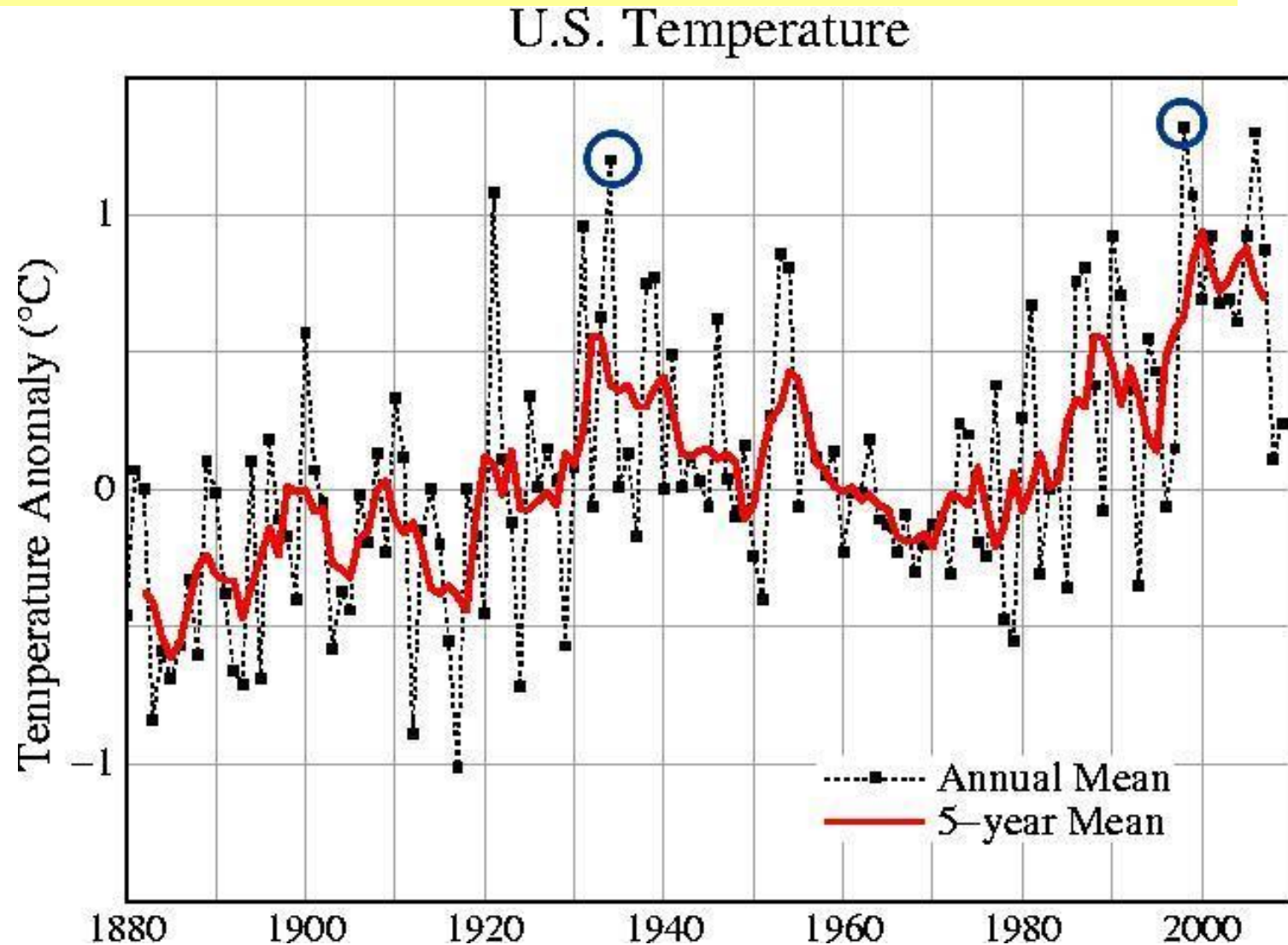
1936 was an extremely warm year. NASA GISS by year temperature plot from 1999. Note Well -- 1936 is the warmest year by far.



**In 2000, NASA GISS adjusted the temperatures.  
Poof! Magic! The warmest year is no longer 1936!**

So, another problem in the US Surface Temperature Record is **outright fraud**, in this case, by NASA GISS., seen by comparing the temperature record in 1999 and here, a year later.

The next slide shows another comparison of what NASA GISS said surface of the surface temperature record in 1974, 1981, 2000 and 2016.



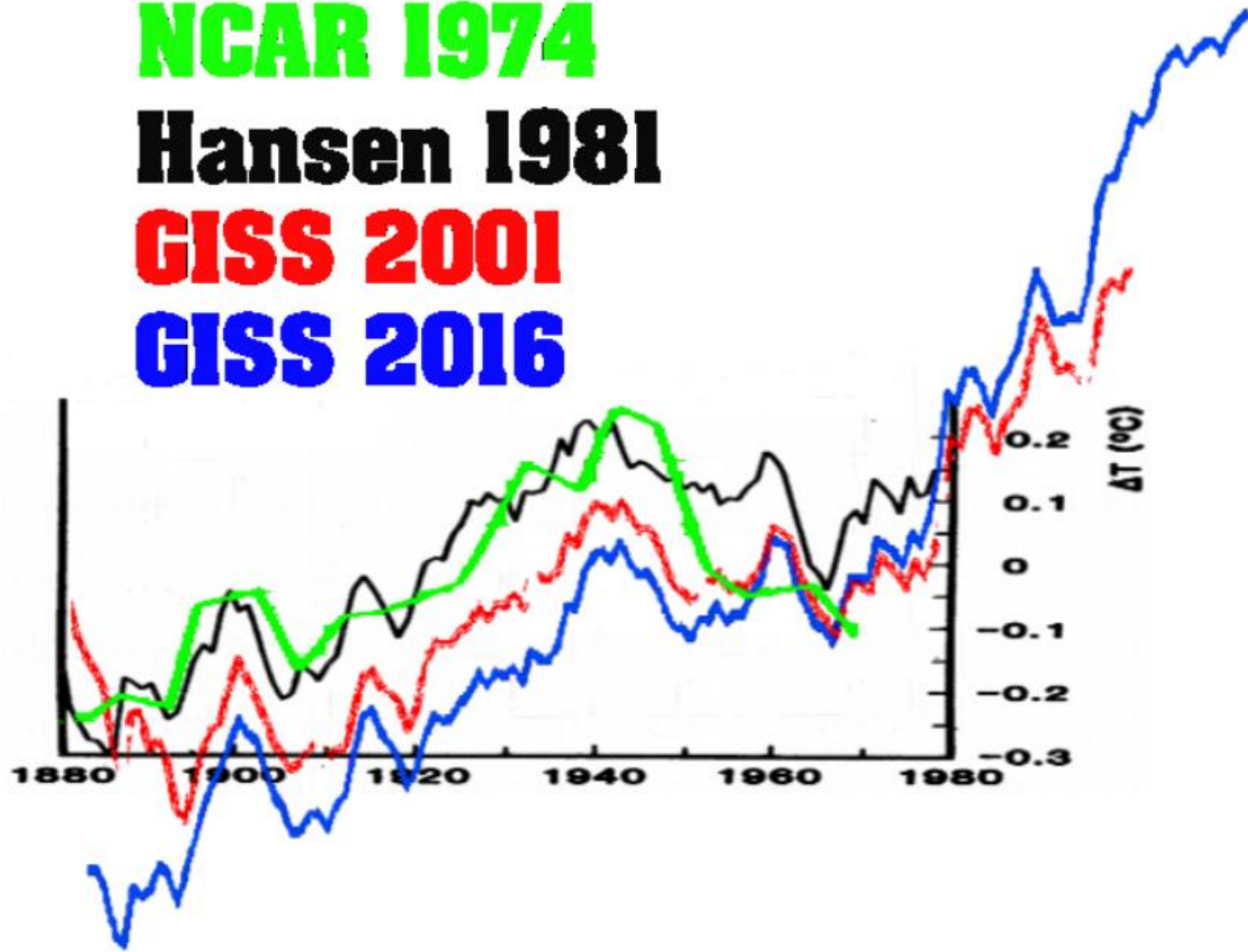


**NCAR 1974**

**Hansen 1981**

**GISS 2001**

**GISS 2016**



# Issues and Questions

## US Surface Temperature Measurements

**Condition of Stephenson Screens: Whitewash vs. Latex,  
Well-Maintained vs. Peeling**

**Is the Stephenson Screen exposed correctly?**

**Are the data correctly entered into the form?**

**How are missing daily data entered, why?**

**Are the monthly data entered into the data base, or missing?**

**How are missing monthly data accounted for?**

**What do the raw data look like?**

**Why are the adjustments made?**

**How are the adjustments made?**

**Which stations are included in the data base?**

# Issues and Questions

## US Surface Temperature Measurements

Why are cooling years removed from the data bases?

Why do we use stations having  $>+2F$  and  $>+5F$  errors in our calculations?

Why do we use stations having  $>+2F$  and  $>+5F$  errors in Policy Decisions?

Why are the most perfect stations' temperatures continually adjusted?

Here is another one:

State of Climate Report: Makes the News, but is incomplete, never corrected.

USCRN: Will this help make US Surface Temperature Record Reliable?

# US Climate Reference Network

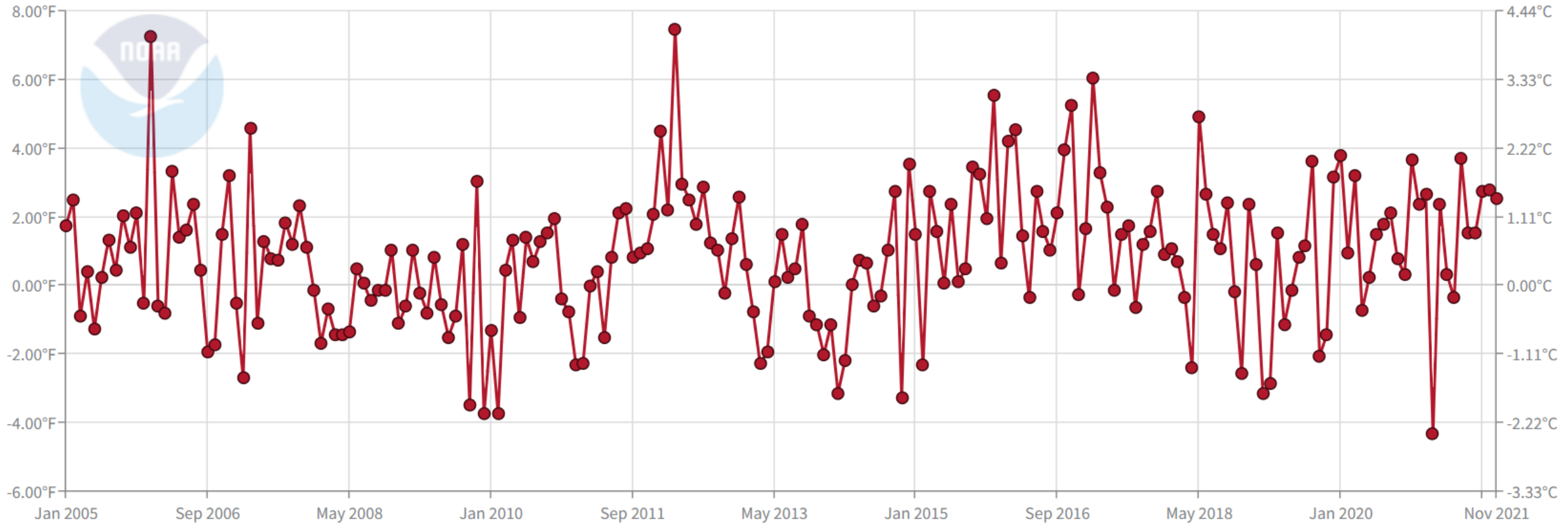
To fix problems with USHCN noted by [www.surfacestations.org](http://www.surfacestations.org) NOAA's National Climatic Data Center (NCDC) commissioned a new [Climate Reference Network](#) (CRN) in 2002, completed 2008, stations in pristine locations, optimal measurement environments, state of the art, triple-redundant sensor systems.

Highest quality data perfect for scientific studies, unimpeachable climate data source next 50 years.



### Average Temperature Anomaly, USCRN

■ ClimDiv ● USCRN ▲ USHCN



JAN 2005

JAN 2010

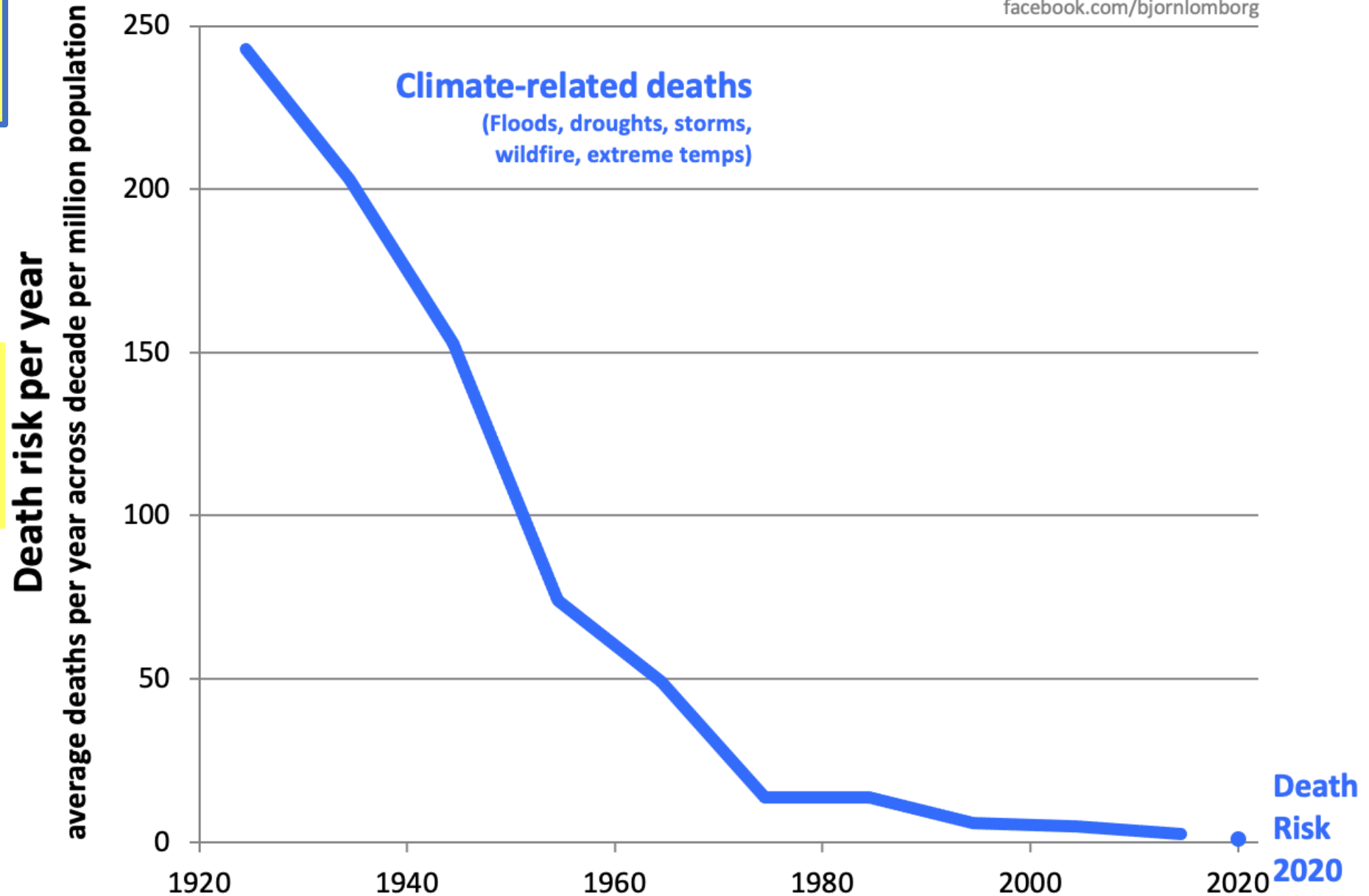
JAN 2015

JAN 2020

Let's examine, in the following graphics, the notion that **use of fossil fuels has made life better for oldsters**, the AARP's clientele

# 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

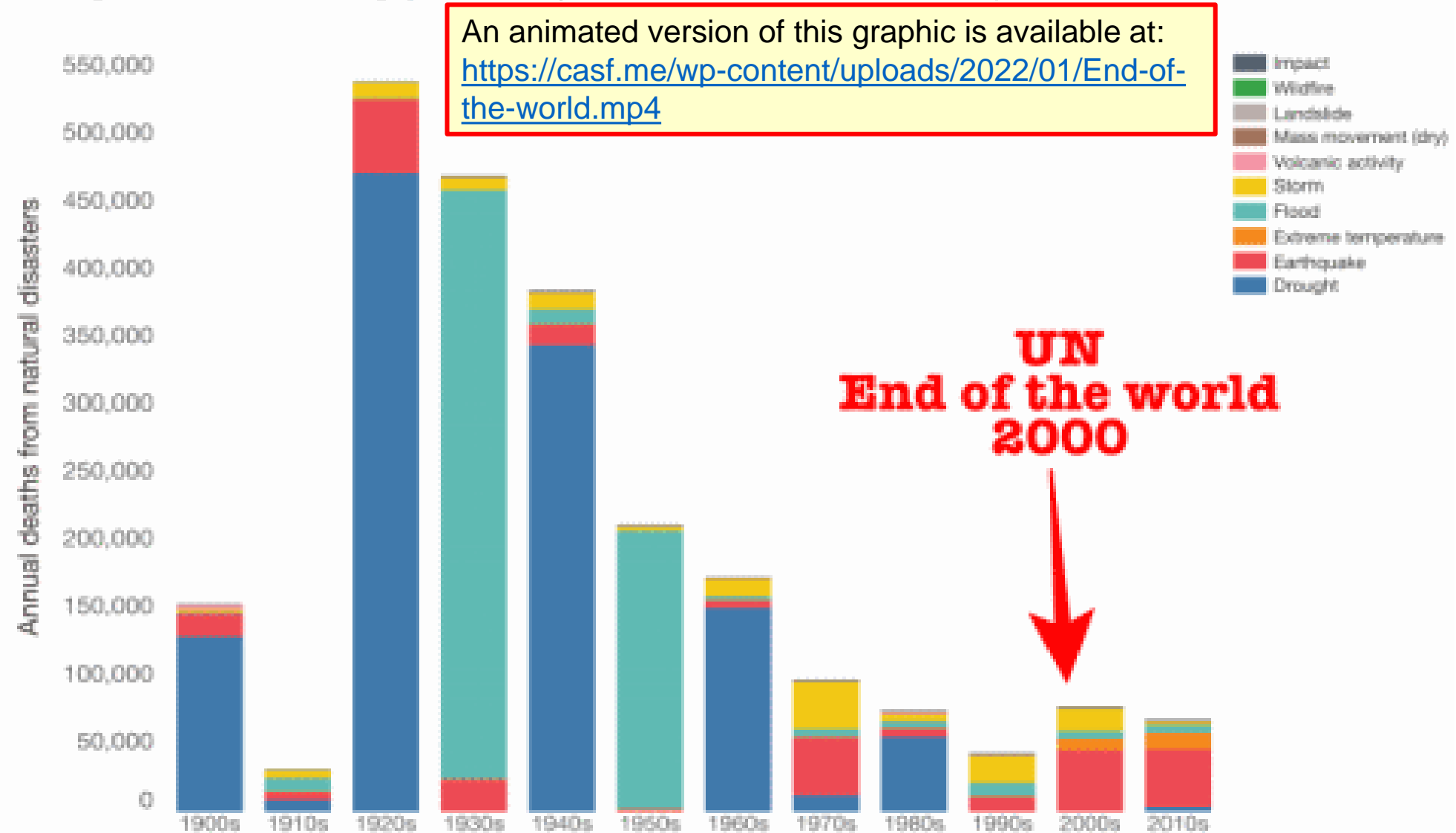
After 100 years of climate change, 'climate related deaths' approach zero

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

# Global annual deaths from natural disasters, by decade

Absolute number of global deaths from natural disasters, per year.

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



**UN  
End of the world  
2000**

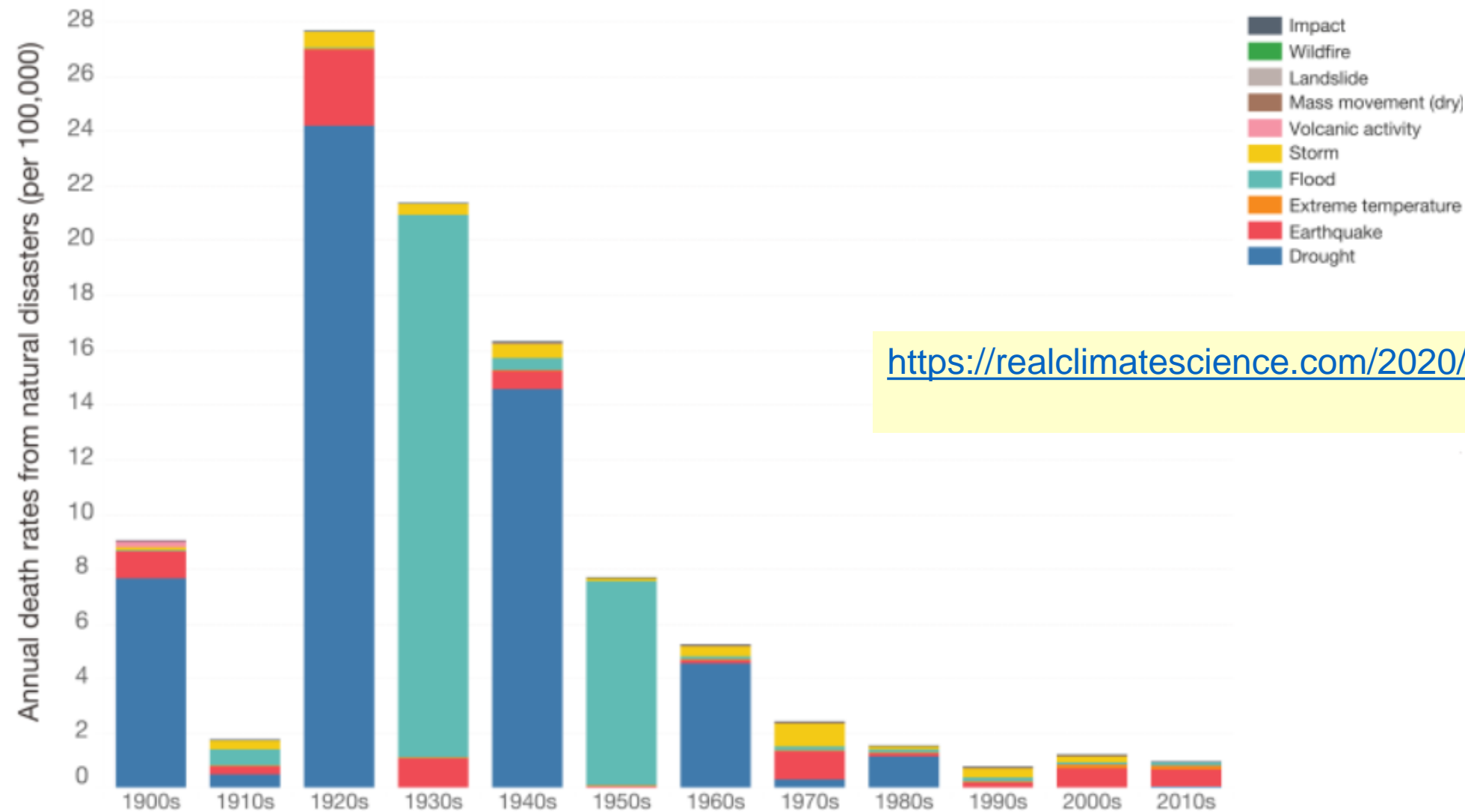




# Global annual death rate from natural disasters, by decade

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/>

Although not a major focus of this presentation, let's see how many overtly or covertly instances where our own government is " tipping the scales" towards a more climate alarmist point of view.

EPA's Heat Wave Index was de-emphasized, because it showed the Dust Bowl of the 1930s had the greatest number of heat waves in the USA.

National Interagency Fire Center hides all fire records before 1983, the El Nino year at the peak of PDO-warm. Few fires occurred. Starting the NIFC records in 1983 cherry picks the starting point, portrays false picture that fires are increasing.

NOAA stopped reporting on Tornadoes EF3 and higher; they now report "all tornadoes." Technology and higher population allows more weak tornadoes to be seen, reported. The marked decrease in strong to severe tornadoes in recent years is deliberately hidden from the public.

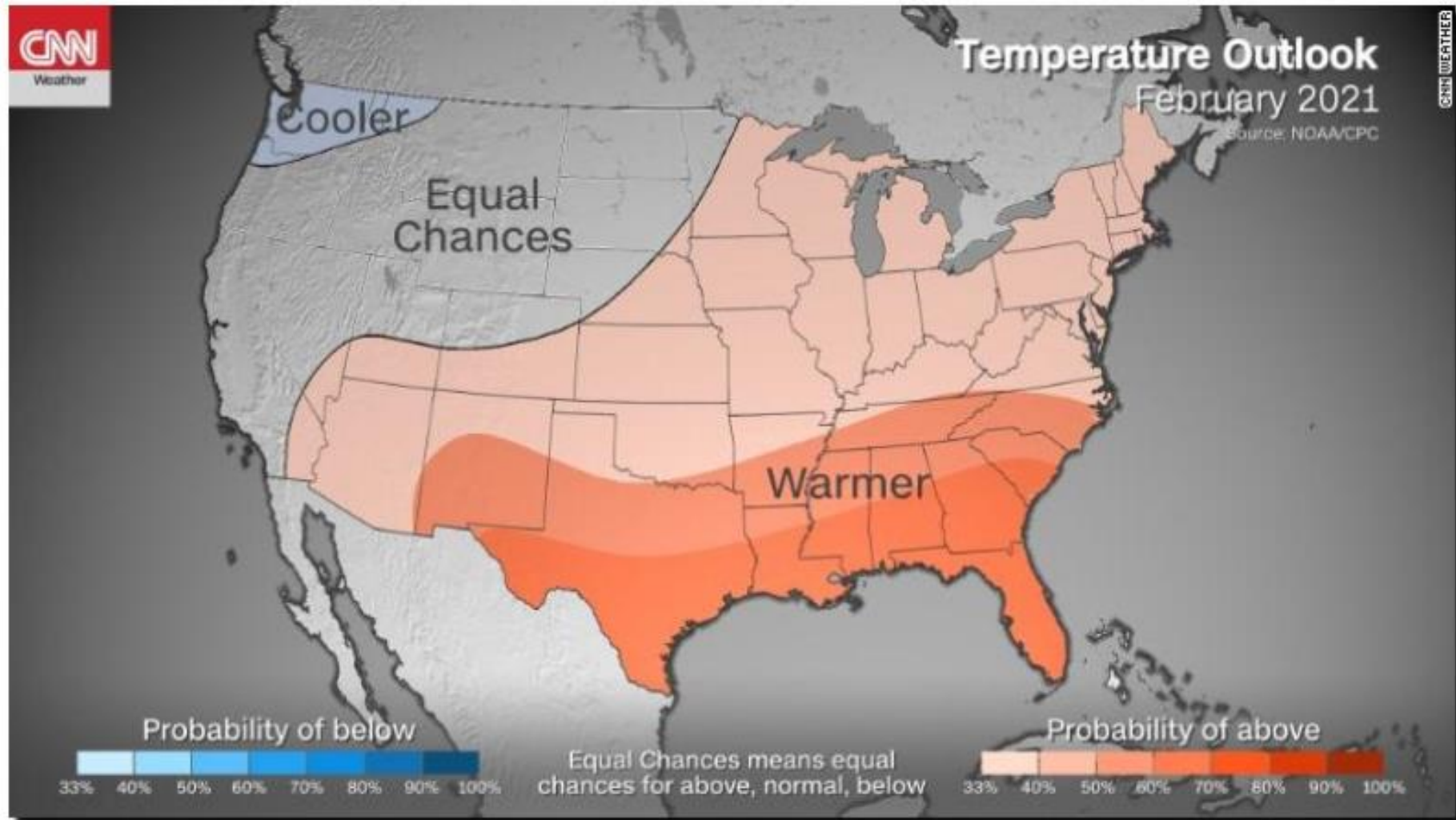
NASA GISS has been fudging surface temperature records for years. They cool the past, eliminate hot temperatures from the 1880s and 1890s and make present temperatures hotter than measured.

Not shown, but clearly the case, it is very difficult to obtain the USCRN time series from Internet Search.

**I had to email NCDC THREE TIMES before they could provide me the location and sequence of keystrokes to access the USCRN time series of temperatures.**

# Sidebar on short term climate forecasting

Experts predicted a warm February in Texas.



[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 —



**NOT A SINGLE ENVIRONMENTAL PREDICTION OF THE LAST 50 YEARS HAS COME TRUE**

**EARTH DAY 1970**

**GWPF**

THE GLOBAL TEMPERATURE WILL BE 4° COLDER BY 1990 AND 11° COLDER BY 2000

100-200 MILLION PEOPLE WILL BE STARVING TO DEATH DURING THE NEXT 10 YEARS

CIVILISATION WILL END WITHIN 15 or 30 YEARS

LIFE EXPECTANCY WILL BE 42 YEARS BY 1980

POPULATION WILL OUTSTRIP ANY SMALL INCREASES IN FOOD SUPPLIES

BY THE YEAR 2000 THERE WON'T BE ANY MORE CRUDE OIL

IN A DECADE URBAN DWELLERS WILL HAVE TO WEAR GAS MASKS TO SURVIVE AIR POLLUTION WHICH WILL BLOCK OUT HALF THE SUNLIGHT

FISH WILL SUFFOCATE

CHILD BEARING WILL BE A CRIME

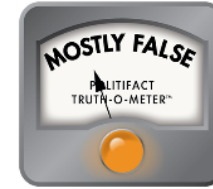
**EARTH DAY 2019**

- CIVILISATION STILL EXISTS
- LIFE EXPECTANCY HAS INCREASED BY 30% TO 72
- EXTREME POVERTY HAS HALVED
- INFANT MORTALITY HAS DECREASED BY 72%
- AIR POLLUTION HAS SHARPLY DECLINED
- FOOD HAS INCREASED FROM 2,300 CAL. PER PERSON A DAY TO 2,800 DESPITE POPULATION INCREASE
- CHINA ENDED ITS ONE CHILD POLICY LAST YEAR
- US OIL + GAS ARE AT THEIR HIGHEST LEVELS SINCE 1972
- AND THE US CONTROLS THE WORLD'S LARGEST UNTAPPED RESERVES
- WORLD DEMOCRACY HAS RISEN 536%
- AVERAGE SCHOOLING HAS INCREASED FROM 3.9 TO 8.4 YEARS, A 115% INCREASE



"A lot of the problems with forest fires ... is because of bad policy (not to clear out the forests) that was put in place by environmentalists."

— [Dana Perino](#) on Tuesday, April 22nd, 2014 in a broadcast of "The Five" on Fox News



To John Barnwell, director of policy for the Society of American Foresters, a professional education group, the lack of money to prevent fires is primary.

But environmentalists and their actions play a role.

Barnwell chafes at the long environmental review process and frequent litigation over Environmental Impact Statements that beset the Forest Service.

A 2010 analysis from [Western Michigan University](#) found that no other agency tops the Forest Service for the number of suits under the National Environmental Policy Act. It averaged about 100 legal challenges each year.

In some well-known cases (**think of the Spotted Owl in the Pacific Northwest**), logging ground to a halt entirely due to environmental protection rules under the Endangered Species Act. Timber harvests on federal land are a fraction of what they were in late 1970s.

<http://www.politifact.com/punditfact/statements/2014/may/01/dana-perino/perino-faults-enviros-mega-fires/>

Ann Camp, a forestry scientist at the Yale School of Forestry and Environmental Studies, says **national environmental groups seem to be intractable to compromise.**

"I can tell you from experience that local environmentalists and local chapters of national environmental organizations have been on board for some activities," Camp said

**"But the national chapters nixed their involvement and had already decided to contest the outcome -- whatever it was if it included any level of harvesting."**

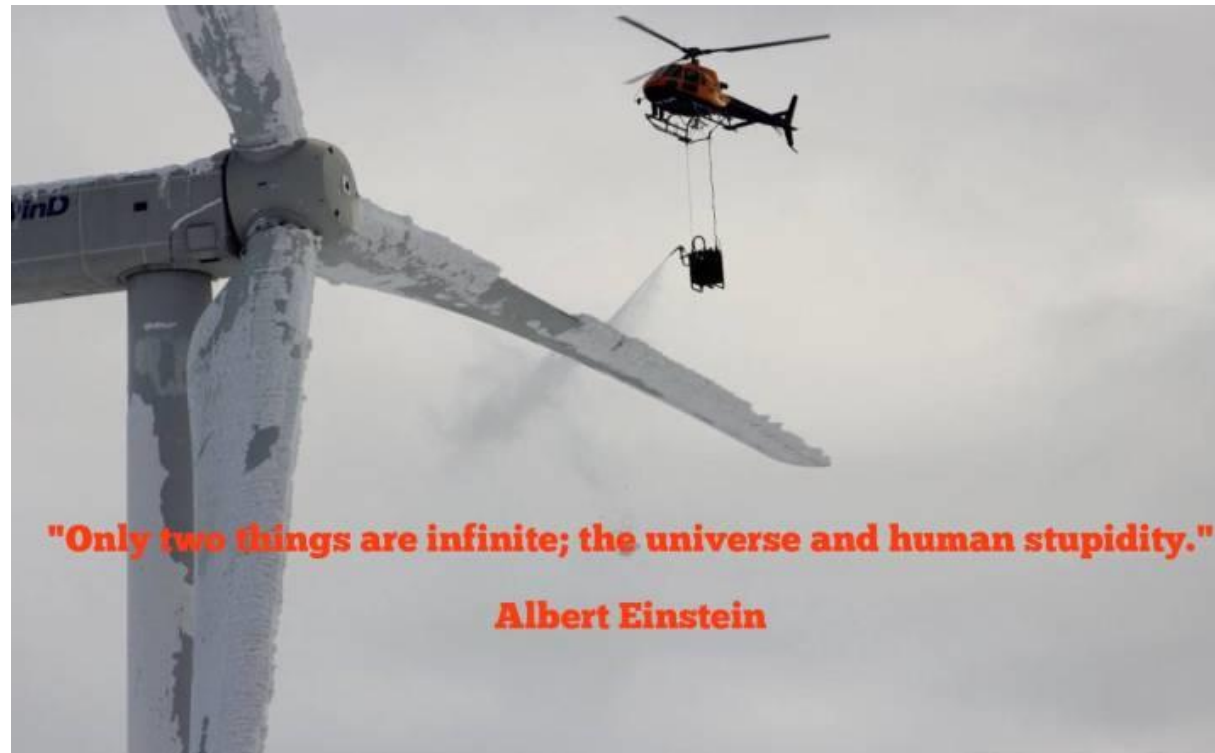


**The entire rationale for wind turbines is to stop global warming by reducing the amount of CO2 being returned to the atmosphere from the burning of fossil fuels.**

In the attached picture, recently taken in Sweden, freezing cold weather has caused the rotor blades of a wind turbine to ice up bringing the blades to a complete stop.

To fix the “problem” a helicopter is employed (burning aviation fuel) to spray hot water (which is heated in the frigid temperatures using a truck equipped with a 260 kW oil burner) on the blades of the turbine to de-ice them.

The aviation fuel, the diesel for the truck, and the oil burned to heat the water, could produce more electricity (at the right time to meet demand) than the unfrozen wind turbine could ever produce. (Before it freezes up again).



The attached picture is a metaphor of the complete insanity of the climate change debate.

In decades to come this one photo alone will sum up an era of stupidity, when rational thought, logic and common sense was abandoned and immense wealth and resources needlessly sacrificed.