Special edition October 3, 2026

CliSciPol

Climate Science and Policy for Nonscientists

One Picture is Worth a Thousand Words.

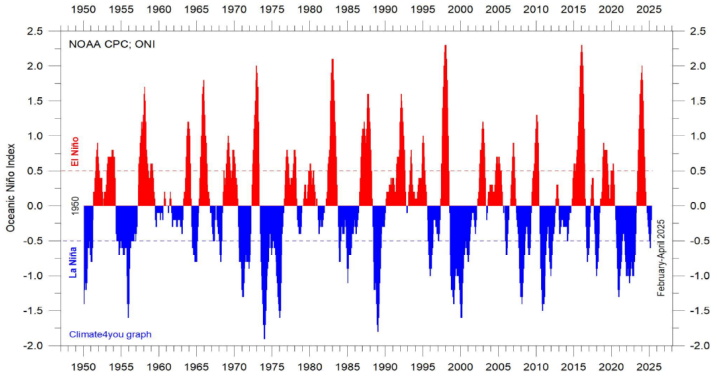
THE "SUPER" EL NINO AND THE ATLANTIC HURRICANE SEASON



There have been zero Atlantic hurricanes this year, so the media has had to find something else to warn about. A current favorite is to focus on the dangers of a "super" El Nino, which will supposedly cause crises of wildfires and droughts in Asia and cause crises of flooding and storms in the Americas. "Super" is not a scientific term. It is a term chosen by alarmists to generate fear of something unusually and extremely bad, i.e. a "crisis."

Scientists distinguish between "normal" El Ninos and "strong" ones, but there is no formal definition of "strong." Scientists have devised a quantitative measure of the strength of various El Ninos and La Ninas. It is called the Oceanic Nino Index (ONI), as shown since 1950. Obviously El Ninos vary significantly in strength. If one defines a "strong" El Nino as one having an ONI of 1.5 or greater, there have been 9 strong El Ninos since 1950, more than one every 10 years. The ONI data shows no clear trend in the frequency or intensity of the cycle.

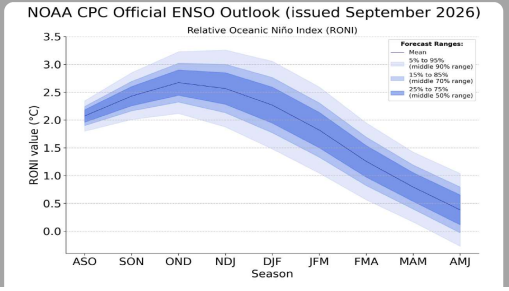
La Niña and El Niño episodes, Oceanic Niño Index (ONI), updated to April 2025



CPC Official ENSO Outlook

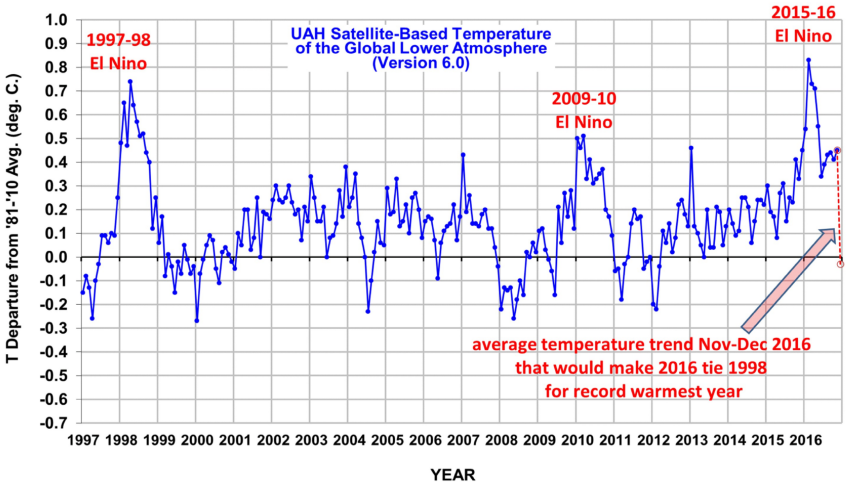
Updated: 10 September 2026

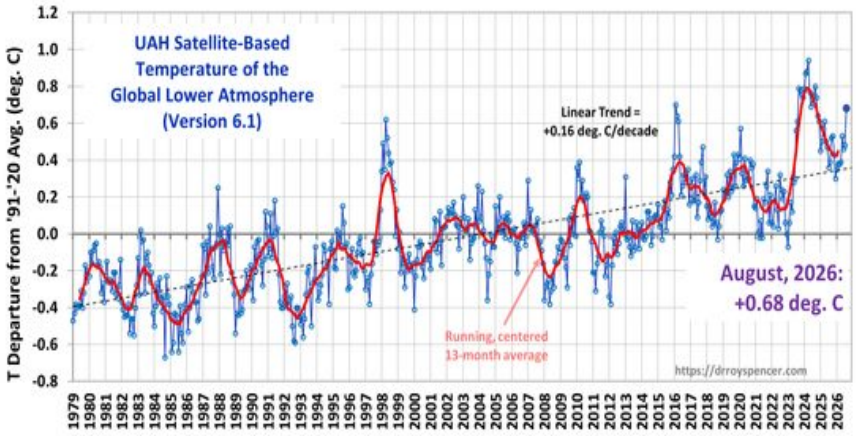
During September-November through November-January 2026-27, there is a greater than 90% chance of a very strong El Niño. During the October-December 2026 season, there is a 75% chance of a historic event that would exceed the strength of previous El Niño events dating back to 1950.



At present the US government's mean forecast is for the ONI to reach 2.6 between October and December. The forecast indicates a 75% chance that the ONI will become the highest since 1950. The highest previous peaks were about 2.3 in 1998 and in 2016.

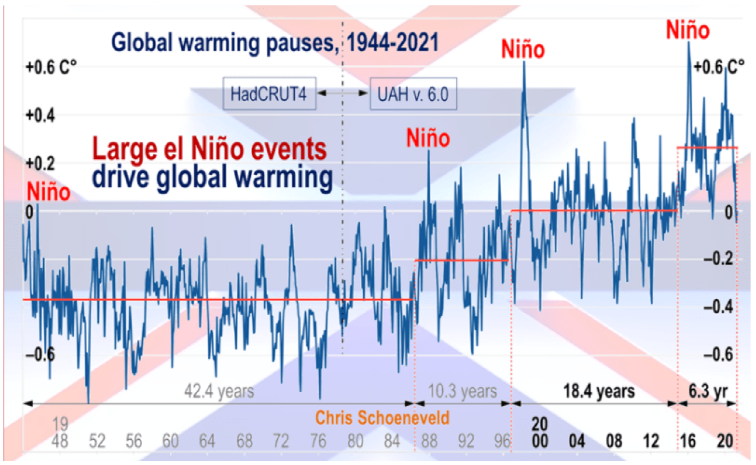
Strong El Ninos will bump up world temperatures, and the bump ups in recent years have always quickly receded.

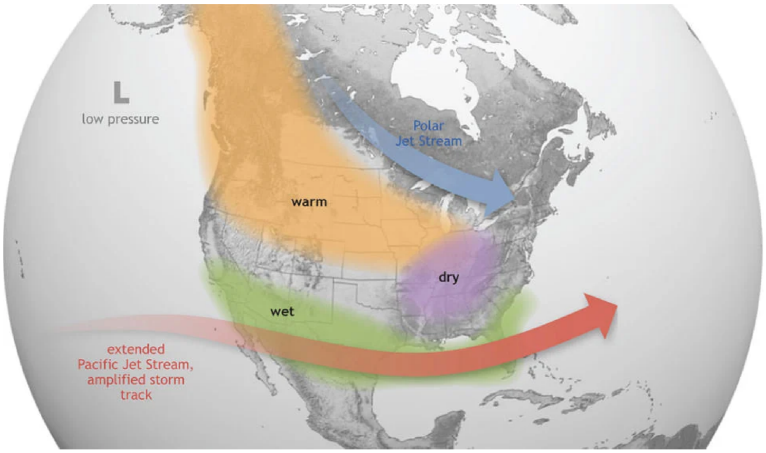




The bump up from the current El Nino has already started to occur. The UAH satellite dataset shows the world average temperature for August 2026 up 0.2 C from July, and the warming in the tropics started earlier.

The IPCC and many scientists attribute virtually all of the current global warming to rising CO2 levels (the "CO2 Control Knob Theory"). There are alternative theories. One such theory is that strong El Ninos cause a step-like increase in global warming with pauses between the steps. The world's steadily rising atmospheric CO2 level does not corrolate at all with the El Nino cycle. The oceans are warmed primarily by direct solar radiation, not by CO2.

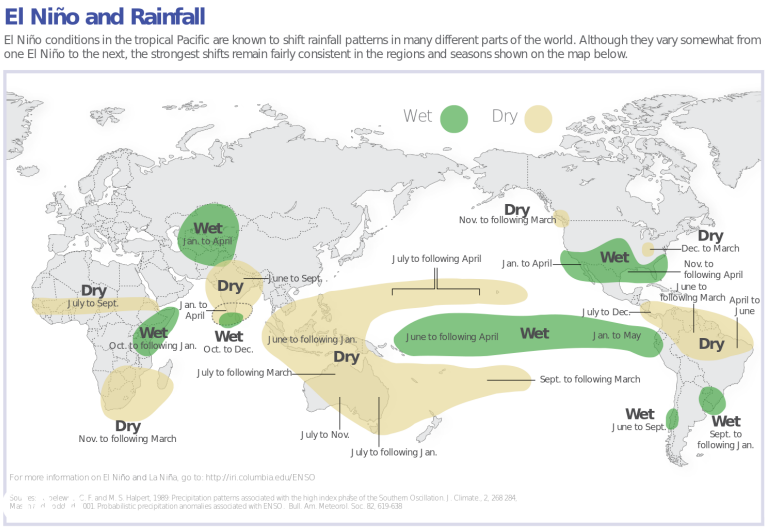


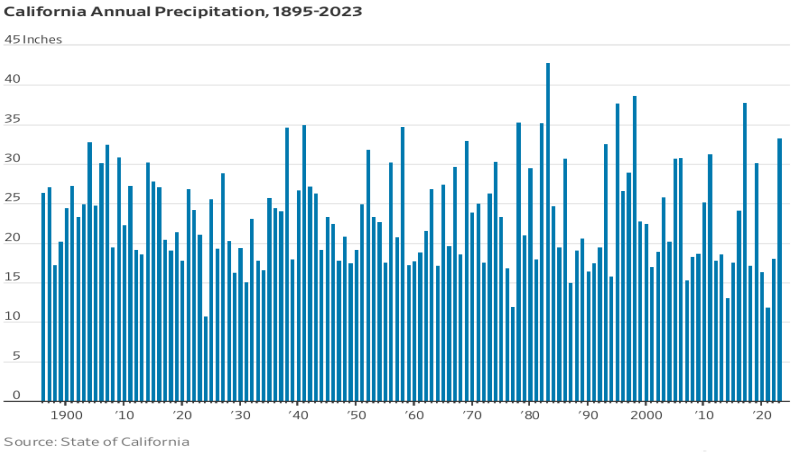


El Niño causes the Pacific jet stream to move south and spread farther east. During winter, this leads to wetter conditions in the Southern U.S. and warmer and drier conditions in the North. © NOAA

Since El Ninos occur so frequently, their effects are well known. The immediate effect is to shift the path of the jet stream, which then affects patterns of rain and drought, as shown for North America.

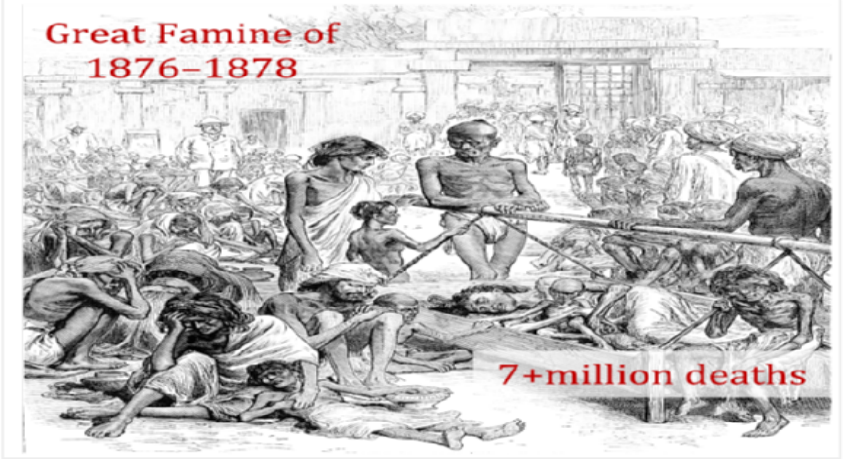
Worldwide this shift of the jet stream brings rain to the Southern US and drought to parts of Asia. The La Nino causes the reverse.

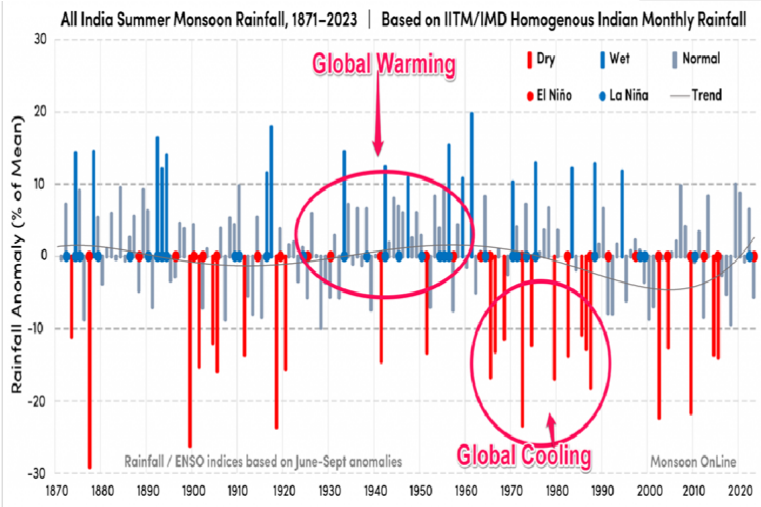




In particular, the El Nino/La Nina cycle is the cause of the regular rain/ drought cycle in California. (And see CliSciPol June 2023 newsletter: Why Does California Have Such Variable Weather?)

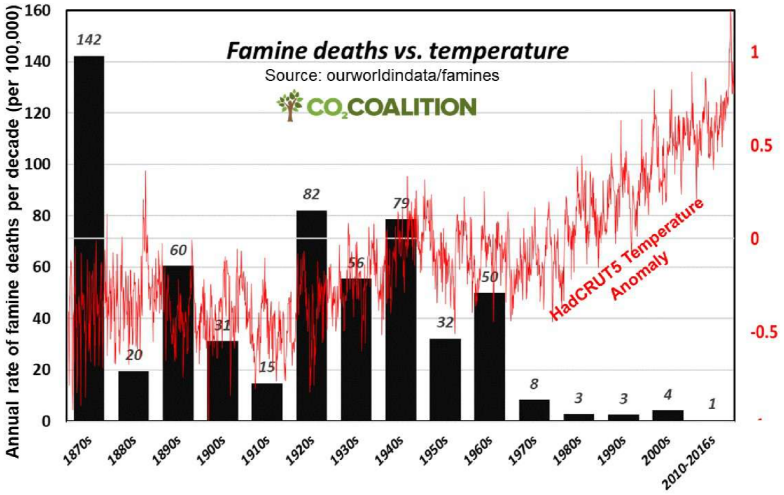
In the distant past the El Nino has caused failures of monsoon rains in Asia, for example, in India and Pakistan, that has led to crop failures and devastating famines.

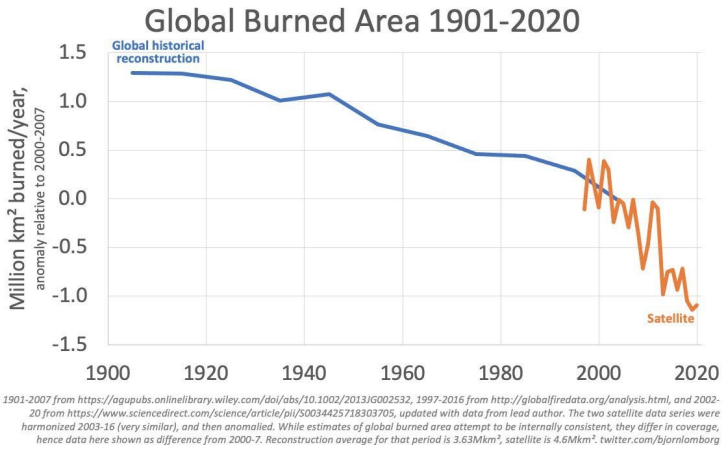




Since 1870 the monsoon cycle of rain and drought has continued with little change. But CO2 is plant food and plant fertilizer. Modern rising CO2 levels have caused the earth to green and contributed significantly to crop production rising faster than the increase in world population. (See CliSciPol science topic: Greening World).

In addition to the tremendous increase in world food production, there have been great advances in food storage and transportation. The droughts cause by El Ninos are limited in area and time, and, since they occur cyclically, the countries threatened, such as India, have learned how to prepare for them. As a result there has been a tremendous decline in deaths due to famine. El Nino droughts no longer cause crises.

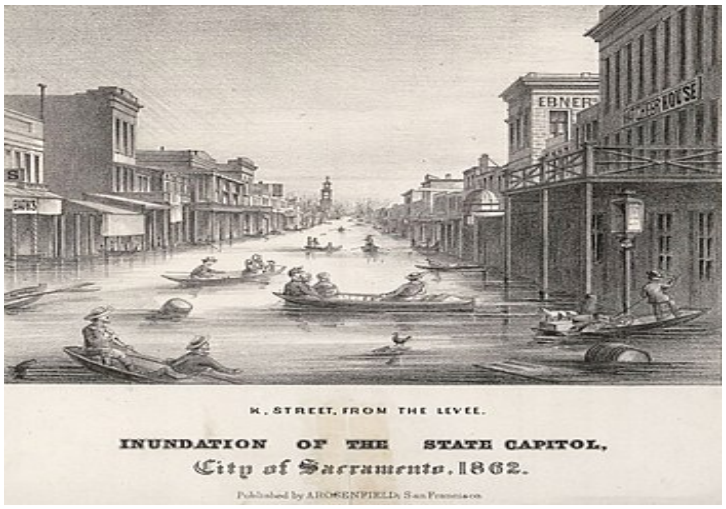




1901-2007 from https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1002/2013JG002532, 1997-2016 from http://globalfiredata.org/analysis.html, and 2002-20 from https://www.sciencedirect.com/science/article/pii/S0034425718303705, updated with data from lead author. The two satellite data series were harmonized 2003-16 (very similar), and then anomalied. While estimates of global burned area attempt to be internally consistent, they differ in coverage, hence data here shown as difference from 2000-7. Reconstruction average for that period is 3.63Mkm², satellite is 4.6Mkm². twitter.com/bjornlomborg

Wildfires wordwide have been steadily declining. There is no correlation between El Nino droughts and increases in wildfire area burned. But the El Nino/La Nina cycle may contribute to increases in wildfire activity in particular jurisdictions, such as California, that do not reasonably manage their wildlands. (See CliSciPol science topic: Wildfires)

The alarmist cartoon at the beginning of this newsletter suggests flooding and storm crises in the Americas, in particular in California. But California has a lengthy history of extreme flooding. The Great Flood of 1862 resulted from a storm that lasted 45 days, and the flood covered one-third of the state. Sacramento was so flooded that the newly elected governor had to take a row-boat to get to his inauguration.



IPCC AR6 CONCLUSIONS ON FLOODING

Heavier rainfall does not always lead to greater flooding. (AR6 WGI p.1073)

Floods are affected by many factors in addition to heavy precipitation (AR6 WGI p.1567)

There is low confidence in the human influence on the changes in high river flows on the global scale. (AR6 WGI p.1596)

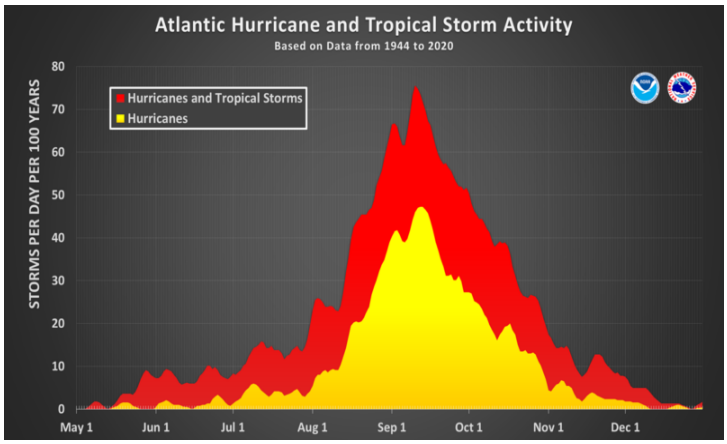
There is limited evidence and low agreement on observed climate change influences for river floods in North America. (AR6 WGI p.1830)

Flood damage can be reduced by 95% by adequate adaptation strategies. (AR6 WGII p.607)

The El Nino will bring heavy precipitation to California January-April. In Southern California heavy rain will immediately cause reservoirs to fill and stream flow to increase. In Northern California heavy snow will pile up and will melt in the spring at rates determined by spring temperatures, so the effect of snow on water flow is deferred.

Will there be a flooding crisis in California? Much depends on the state's preparedness. On September 21 Governor Newsom declared a state of emergency due to the anticipated El Nino, but present actions can not make up for long term failures to build and maintain the infrastructure needed to control flood waters, such as dams, levees, drainage canals, reservoirs, and catchment areas.

California's environmentalists have for years blocked sensible water management projects intended to reduce flood risk and damage. Environmentalist even advocate having dams torn down, because they interfere with the "natural" flow of rivers and streams. One thing is certain - if serious flooding occurs in California over the next six months, Governor Newsom will blame climate change rather than admit to a failure of government preparedness for the regularly-occurring heavy precipitation caused by El Ninos.



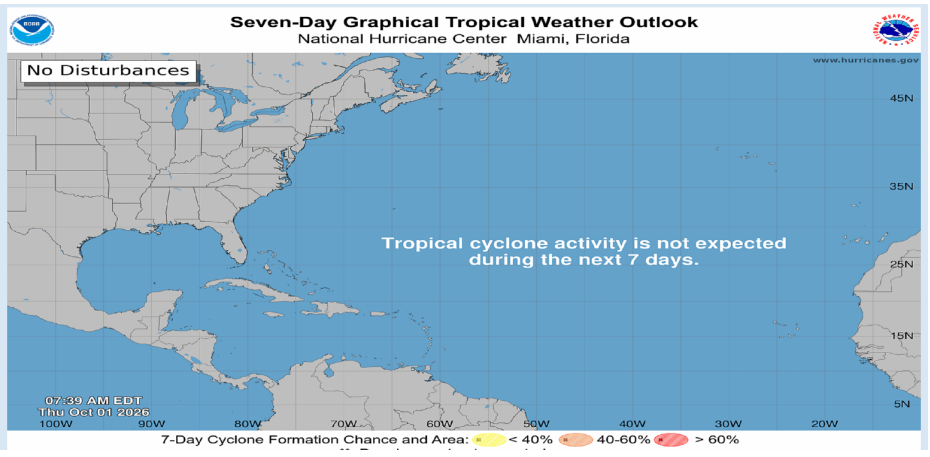
EL NINOS REDUCE ATLANTIC HURRICANES

The cartoon suggests that the "super" El Nino will increase storms in the Americas. But, in actuality, El Ninos reduce the frequency and intensity of storms. The Atlantic hurricane season on average peaks on Sept. 10, and on average September is by far the most active month for storms and hurricanes..

But through September 30, this hurricane season has set a record for low storm and hurricane activity. To use a favorite word of alarmists, to reach September 30 with zero hurricanes is "unprecedented." And the Accumulated Cyclone Energy for the season through September 30 is only 13% of the average. While there have been 8 tropical storms (wind speed 39-73 mph) through Sept. 30, 4 storms lasted only one day (Arthur, Cristobal, Dolly, and Gonzalo), Hanna lasted 2 days, and Edouard lasted 3 days

ATLANTIC BASIN STORMS 2026 TO SEPT. 30

	Number To Sept. 30	Multi-year Average To Sept. 30
Tropical Storms	8	10
Hurricanes	0	5
Major Hurricanes	0	2
Accumulated Cyclone Energy	11	86



As of October 1 the US Hurricane Center could not find even a 40% chance of any storm forming over the next 7 days.

Scientists agree that El Ninos lead to lower Atlantic storm and hurricane activity.

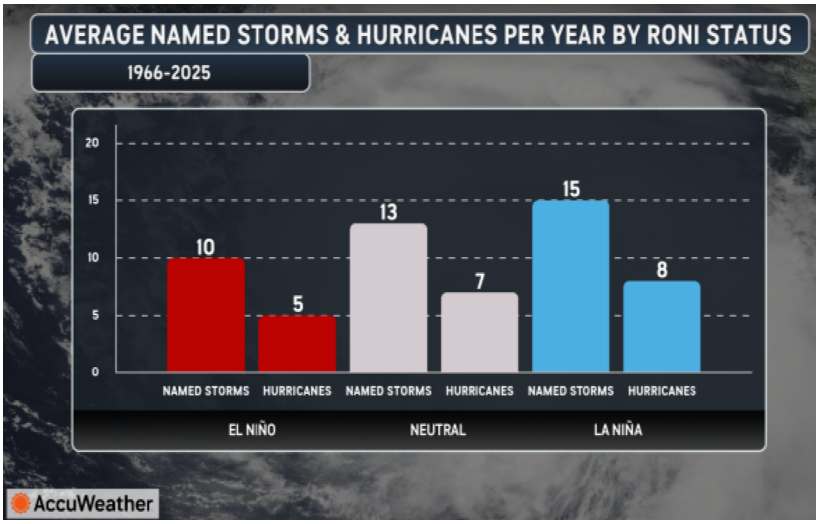
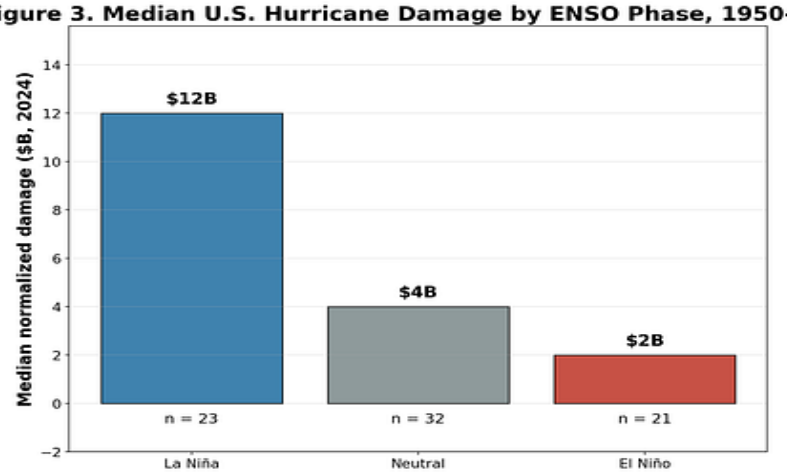


Figure 3. Median U.S. Hurricane Damage by ENSO Phase, 1950-2025



And this results in substantially less US hurricane damage in El Nino years. Those of us who live on the US East coast and on the gulf coast should rejoice that it is a strong El Nino year.

All footnote citations are to the Intergovernmental Panel on Climate Change's publication, Climate Change, The Physical Science Basis, the first part of the Sixth Assessment Report (AR6, WGI 2021), and to the second part, Impacts, Adaptation, and Vulnerabilit. (AR6, WGII 2022).