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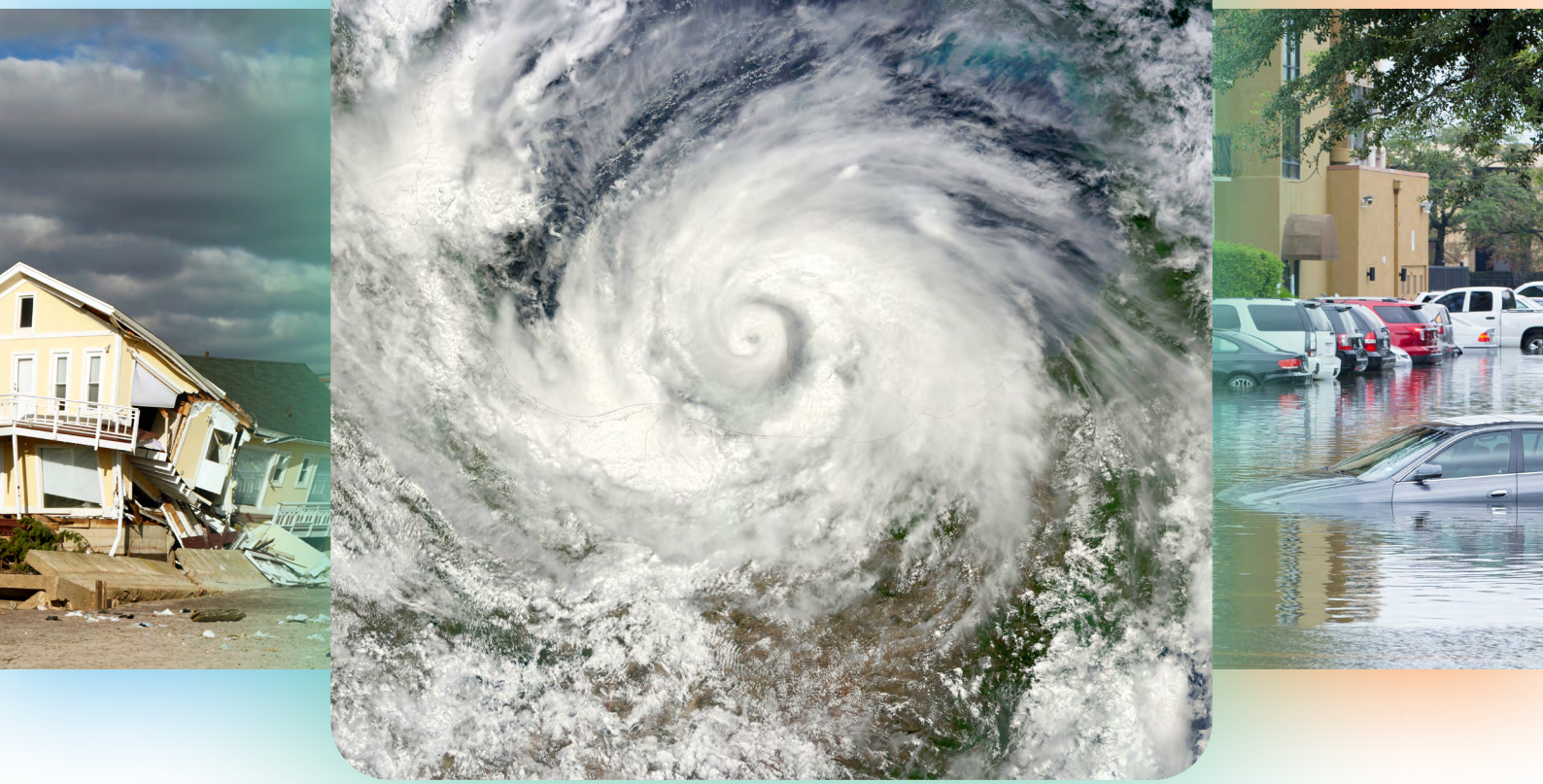


EXPERT VIEWS

EL NIÑO 2026:

IMPLICATIONS FOR GLOBAL CATASTROPHE RISK AND INSURED LOSSES

SEPTEMBER 2026

EXECUTIVE SUMMARY

- El Niño conditions are expected to strengthen during the second half of 2026 and to persist into early 2027, with a high probability of strong or very strong conditions during the peak Atlantic hurricane season.
- El Niño typically suppresses Atlantic hurricane activity and reduces the likelihood of U.S. hurricane landfalls. However, it does not eliminate tail risk, as a single landfalling hurricane can still generate substantial insured losses during an otherwise quiet season.
- Historical normalized U.S. hurricane losses are considerably lower during El Niño years than during La Niña years but are more variable relative to their average level. La Niña years have historically produced higher but comparatively more stable annual loss outcomes.
- Neutral years have generated the highest average normalized U.S. hurricane losses and above-average relative loss volatility over 1970–2025, largely reflecting the influence of a small number of exceptionally damaging events.
- Atlantic hurricane activity and U.S. landfalls have been elevated since 1998, a period that has also experienced a higher frequency of La Niña conditions. Counterfactual analysis suggests that this shift in ENSO frequency may have contributed to higher average hurricane losses, although the estimated effect is highly uncertain and explains only part of the broader change.
- Strong El Niño events have frequently been followed by La Niña conditions, raising the possibility of a subsequent transition toward a more hurricane-favorable Atlantic environment. The evolution of ENSO beyond 2026 nevertheless remains uncertain.
- Outside the Atlantic, El Niño effects vary substantially by region and peril. Historical evidence indicates higher Western North Pacific typhoon losses and elevated flood risk in parts of the United States and Latin America, alongside drier conditions across Australia and parts of Southeast Asia. Several of these relationships remain uncertain.



CONTENTS

El Niño 2026: Implications for Global Catastrophe Risk and Insured Losses 1
Executive Summary 2
1. What is El Niño? 4
2. What should we expect for 2026 El Niño? 4
2.1 2026 Atlantic hurricane season forecast 5
2.2. 2026 Western North Pacific typhoon season 5
2.3 What could follow the 2026-27 El Niño? 5
3. How does El Niño influence Atlantic hurricane risk? 6
3.1 What about the impact of El Niño on insured losses? 7
3.2 What about La Niña and Neutral years? 7
3.3 Which ENSO phase produces the most predictable losses? 8
3.4. Is there a link between ENSO and the recent increase in hurricane activity? 8
4. How does El Niño impact Western North Pacific typhoon losses? 11
5. How does El Niño influence U.S. severe convective storm, flood, and wildfire losses? 12
6. Other Regional Impacts of El Niño 13

1. WHAT IS EL NIÑO?

In a nutshell, **El Niño** is the "warm" phase of the El Niño-Southern Oscillation (ENSO), a **naturally occurring ocean-atmosphere phenomenon** that occurs every two to seven years in the tropical Pacific.[1]

Under normal conditions, trade winds blow from east to west across the equatorial Pacific, pushing warm surface waters toward Australia and Indonesia. During an El Niño episode, these winds weaken, allowing warm ocean waters to shift eastward toward the coast of South America. This reorganization of ocean and atmospheric circulation alters temperature, rainfall, and wind patterns around the world.

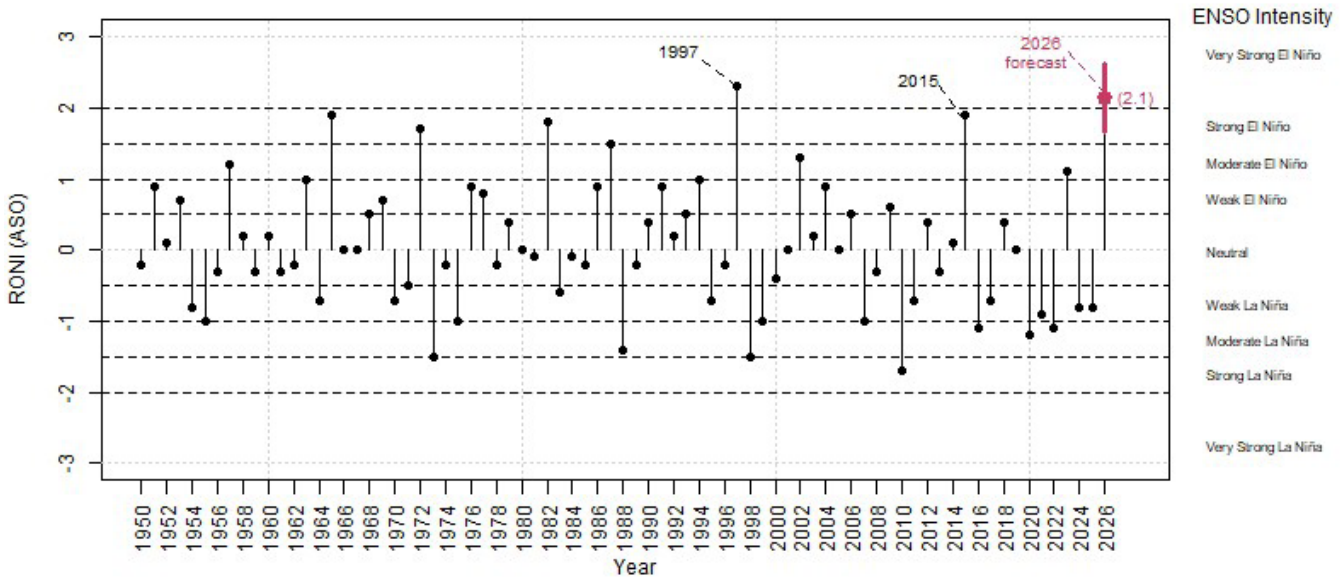
Because ENSO influences large-scale weather patterns, **El Niño has significant implications for catastrophe risk**. Its impacts vary by region and peril, affecting tropical cyclone activity, precipitation extremes, flooding, drought, and wildfire conditions across different parts of the globe.

2. WHAT SHOULD WE EXPECT FOR 2026 EL NIÑO?

El Niño conditions are already present in the Pacific (August 2026) and are expected to strengthen during the second half of the year, persisting into early 2027. Based on the Relative Oceanic Niño Index (RONI),[2] there is approximately a 90% probability that El Niño will reach strong or very strong intensity during the peak Atlantic hurricane season.[3]

The August 2026 forecast from NOAA Climate Prediction Center (CPC)[4] indicates a median August-September-October (ASO) RONI value of approximately 2.14. If realized, this would place the event among the strongest El Niño conditions observed in the historical record since 1950, alongside episodes such as 1997-98 and 2015-16 (Figure 1).

FIGURE 1: HISTORICAL ENSO STRENGTH BASED ON THE RELATIVE OCEANIC NIÑO INDEX (RONI) OF THE PEAK ATLANTIC HURRICANE SEASON MONTHS (ASO: AUGUST-SEPTEMBER-OCTOBER) FROM 1950–2025, TOGETHER WITH THE 2026 MEDIAN FORECAST VALUE AND ASSOCIATED UNCERTAINTY RANGE (IN RED). Data source: NOAA Climate Prediction Center, Graphic: SCOR.



2.1 2026 ATLANTIC HURRICANE SEASON FORECAST

El Niño is generally associated with reduced Atlantic hurricane activity, while La Niña tends to favor more active hurricane seasons. The primary mechanism is an increase in wind shear and atmospheric stability across the Caribbean Sea and tropical Atlantic, hindering tropical cyclone development and intensification, whereas La Niña produces the opposite effect.

Based on the latest NOAA 2026 outlook (as of 6 August):[5]

- 75% probability of a below-normal season, 20% near-normal, 5% above-normal
- 7-13 named storms, including 2-6 hurricanes and 0-2 major events

The average season has 14 named storms with 7 hurricanes, including 3 major hurricanes.

NOAA estimates that these forecast ranges have approximately a 70% probability of being realized, highlighting that considerable uncertainty remains despite the high confidence in a below-normal season outlook.

The outlook provides guidance on overall basin activity and does not predict if and where storms will make landfall; significant insured losses can still result from a single hurricane, even during an otherwise quiet season.

2.2. 2026 WESTERN NORTH PACIFIC TYPHOON SEASON

Compared with the Atlantic basin, tropical cyclone activity in the Western North Pacific is generally less sensitive to ENSO in terms of the total number of storms. However, El Niño conditions tend to favor the development of more intense typhoons. During El Niño years, tropical cyclones typically form farther east and south over warmer ocean waters, allowing them to remain over favorable environmental conditions for longer periods and increasing the likelihood of reaching typhoon intensity.[6] Looking ahead, forecasts suggest that the **2026 Western North Pacific typhoon season is likely to be more active than normal.**[7] [8] Current outlooks indicate:

- An elevated landfall risk for Japan and Korea;
- Near-normal to below-normal typhoon activity affecting the Philippines.

It should be noted, however, that the historical skill of July seasonal forecasts for Western North Pacific activity is only moderate, and forecast uncertainty remains significant.

2.3 WHAT COULD FOLLOW THE 2026-27 EL NIÑO?

Strong El Niño events are often followed by La Niña conditions as the coupled ocean-atmosphere system adjusts and transitions toward a more neutral state. This pattern was observed following the major El Niño episodes of 1982-83, 1997-98, and 2015-16, suggesting an elevated likelihood of La Niña development in the years following a strong El Niño event.

While the evolution of ENSO beyond 2026 remains uncertain, a transition toward La Niña would have important implications for catastrophe risk, particularly in the Atlantic basin, where La Niña conditions are typically associated with more favorable conditions for hurricane development.



3. HOW DOES EL NIÑO INFLUENCE ATLANTIC HURRICANE RISK?

As discussed earlier, El Niño is generally associated with reduced Atlantic hurricane activity, while La Niña tends to favor more active seasons. Historical observations are consistent with this relationship. As shown in Table 1, the United States experiences fewer hurricane landfalls during El Niño years than during either La Niña or neutral years.

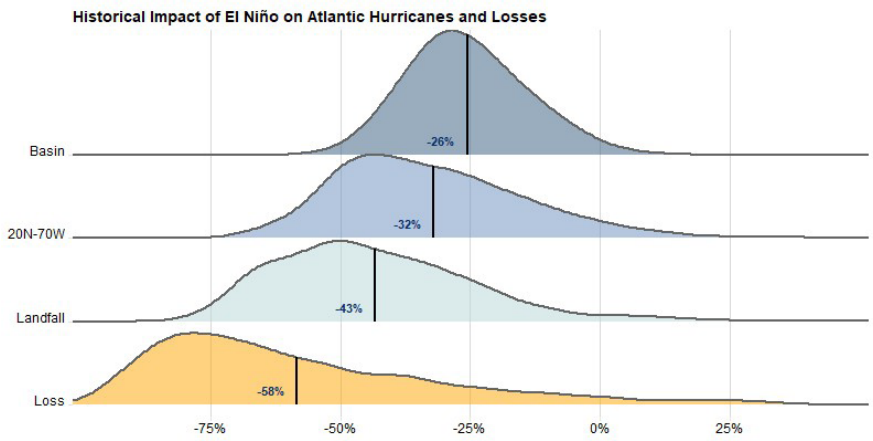
TABLE 1: CONTINENTAL UNITED STATES HURRICANE LANDFALL ANNUAL FREQUENCY FROM 1950 TO 2025 FOR DIFFERENT ENSO TYPES. UNCERTAINTY RANGE (AT 95% LEVEL) IN PARENTHESIS CALCULATED USING BOOTSTRAP METHODOLOGY. *Source: HURDAT2*

HURRICANE CONTINENTAL US LANDFALLS BY ENSO TYPE			
Hurricane Landfalls	Category 1 and above	Category 3 and above	Number of years
El Niño	1.1 (0.7-1.6)	0.3 (0.1-0.7)	20
La Niña	2.0 (1.5-2.6)	0.7 (0.4-1.0)	21
Neutral	1.6 (1.1-2.1)	0.6 (0.3-0.9)	35

The influence of ENSO can be observed throughout the hurricane lifecycle. Compared with La Niña years, basin-wide hurricane activity is estimated to decline by approximately **26%** during El Niño years (Figure 2). This reduction reflects the suppressing effect of enhanced vertical wind shear on hurricane formation and intensification across the tropical Atlantic. The ENSO signal becomes even more pronounced in the western Atlantic (northwest of 20°N, 70°W), a region where hurricanes have a higher likelihood of making landfall.[9] In this area, hurricane counts decrease by approximately 32% during El Niño years.

Previous research[10] indicates that Atlantic hurricanes tend to follow more northeasterly tracks during the warm phase of ENSO, consistent with fewer storms reaching the western Atlantic and the U.S. coastline. As a result, the reduction is greatest for U.S. hurricane landfalls, which are estimated to occur approximately 43% less frequently during El Niño years than during La Niña years (Figure 2). In other words, El Niño influences both hurricane formation and typical track behavior, reducing the historical frequency of U.S. landfalls relative to La Niña.

FIGURE 2: ESTIMATED PERCENTAGE DIFFERENCES BETWEEN EL NIÑO AND LA NIÑA YEARS



(i.e., 100% (El Niño/La Niña -1)) for Atlantic basin hurricane counts, western Atlantic hurricane counts (northwest of 20°N-70°W), continental U.S. hurricane landfalls, and normalized U.S. tropical cyclone insured losses. Vertical lines indicate the point estimates; shaded densities show their bootstrap sampling distributions. Wider distributions indicate greater uncertainty.*

ENSO phase classification is based on the NOAA August-October Relative Oceanic Niño Index (RONI). Hurricane data is from NOAA's HURDAT2 database, while insured loss data is from the Aon Catastrophe Insight Database and was processed as described in the text. Analysis and graphic: SCOR.

3.1 WHAT ABOUT THE IMPACT OF EL NIÑO ON INSURED LOSSES?

To quantify the impact of ENSO on losses, we have used annual U.S. tropical cyclone insured losses from the Aon Catastrophe Insight database (1970-2025). We divided each annual loss by its corresponding 20-year moving-average loss trend, producing a normalized loss ratio that expresses each year's loss relative to its prevailing long-term baseline. This reduces the influence of inflation, exposure growth and changes in insured values. Because the transformation may also remove part of any long-term climate-related loss trend, the resulting ratios are used to compare the relative loss characteristics of ENSO phases rather than to estimate long-term changes in absolute losses.

Consistent with the reduction in hurricane activity and landfalls discussed above, normalized hurricane losses during **El Niño years are estimated to be approximately 58% lower than during La Niña years**. The stronger loss signal is likely related to the larger ENSO influence on major U.S. hurricane landfalls (Category 3 and above), which have occurred more frequently during La Niña years in the historical record (see Table 1) and account for a disproportionate share of insured losses.

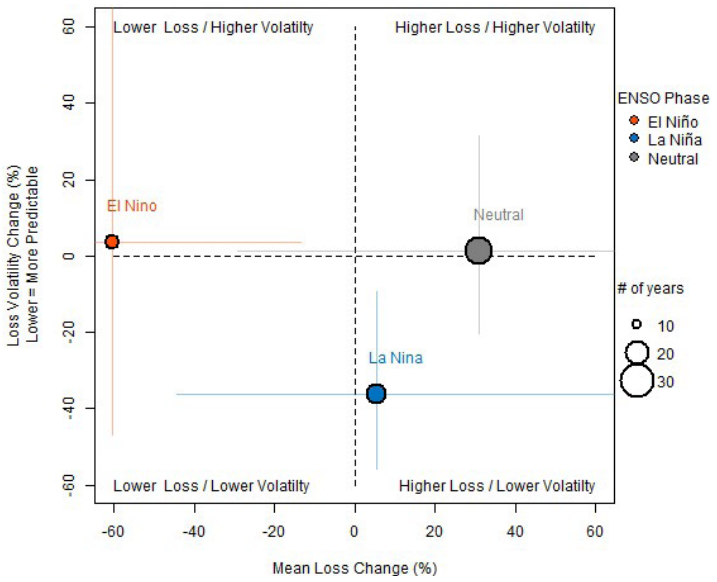
Uncertainty increases as one moves from basin-wide activity to landfalls and losses, reflecting the growing importance of individual storm tracks, landfall locations, and local exposure concentrations. Historical experience shows that major losses can still occur during relatively quiet hurricane seasons. For example, Hurricane Betsy (1965) and Hurricane Andrew (1992) both occurred during El Niño conditions and caused substantial damage. Total damage depends more on where hurricanes make landfall, and their strength at that point, than how many form. **Consequently, a strong El Niño may reduce the expected frequency of hurricane losses, but it does not eliminate the potential for a major loss event.**

3.2 WHAT ABOUT LA NIÑA AND NEUTRAL YEARS?

In contrast to El Niño, La Niña conditions tend to favor Atlantic hurricane development by reducing vertical wind shear over the tropical Atlantic and creating a more favorable environment for storm formation and intensification. Consistent with this relationship, La Niña years are associated with higher hurricane activity and more U.S. hurricane landfalls than El Niño years. However, based on the last 55 years of normalized loss data, **average hurricane losses during La Niña years are only modestly above the long-term average** (Figure 3).

On the other hand, some of the most damaging hurricane seasons in the historical record occurred during **Neutral ENSO conditions. Normalized losses during Neutral years are estimated to be approximately 31% above the long-term average**, reflecting the occurrence of several major landfalling hurricanes during the past 55 years, including Hurricane Andrew (1992) and Hurricane Katrina (2005). Once again, this highlights that ENSO influences hurricane risk but is not the sole driver of loss outcomes.

FIGURE 3: MEAN CHANGE IN NORMALIZED U.S. TROPICAL CYCLONE LOSSES (X-AXIS) AND RELATIVE LOSS VOLATILITY (Y-AXIS) BY ENSO PHASE, COMPARED WITH THE LONG-TERM AVERAGE



Bubble size indicates the number of years within each ENSO phase classification. Horizontal and vertical error bars show the 95% confidence intervals for the estimated mean loss change and volatility change, respectively, derived through bootstrap resampling. Data sources are NOAA (ENSO and hurricane data) and the Aon Catastrophe Insight Database (insured loss data). Analysis and graphic: SCOR.

3.3 WHICH ENSO PHASE PRODUCES THE MOST PREDICTABLE LOSSES?

Figure 3 also highlights important differences in loss volatility across ENSO phases. The y-axis shows the relative change in the historical volatility of normalized U.S. hurricane losses compared with the long-term average. Volatility is measured using the Coefficient of Variation (CoV), defined as the ratio of the standard deviation of losses to their mean. Unlike the standard deviation alone, the CoV expresses variability relative to the average loss level, allowing comparison across ENSO phases with very different mean losses. A higher CoV indicates greater relative year-to-year variability and, in this historical sense, lower predictability of annual loss outcomes.

Among the three ENSO phases, **La Niña years appear to be the most predictable**, combining slightly above-average losses with approximately 36% lower volatility than the long-term average. Although La Niña tends to favor more active hurricane seasons, annual loss outcomes have historically been more stable relative to their average level.

In contrast, **El Niño years exhibit substantially lower average losses but slightly higher volatility than average**. While expected losses are reduced, the occurrence of occasional large loss events means that annual loss outcomes remain comparatively difficult to predict.

Neutral years have historically been the least favorable ENSO phase from an insurance perspective, combining the highest average normalized hurricane losses with above-average loss volatility. They have also been the most common ENSO phase over the past 55 years, accounting for 35 of those years. This reflects the disproportionate influence of a small number of major landfalling hurricanes, which have increased both the mean and variability of losses during Neutral conditions.

It is important to note that uncertainty around these estimates remains substantial. The historical record is relatively short, and results are sensitive to a small number of extreme loss events. Consequently, the findings should be interpreted as broad historical tendencies rather than deterministic relationships.

3.4. IS THERE A LINK BETWEEN ENSO AND THE RECENT INCREASE IN HURRICANE ACTIVITY?

Atlantic hurricane activity has been substantially higher during the last three decades than during the earlier part of the historical record. As shown in Table 2, the average annual number of U.S. hurricane landfalls increased from 1.4 per year during 1970-1997 to 1.9 during 1998-2025.

TABLE 2: CONTINENTAL UNITED STATES HURRICANE LANDFALL ANNUAL FREQUENCY DURING 1970-1997 AND 1998-2025. UNCERTAINTY RANGE (AT 95% LEVEL) IN PARENTHESIS CALCULATED USING BOOTSTRAP METHODOLOGY. *Source: HURDAT2*

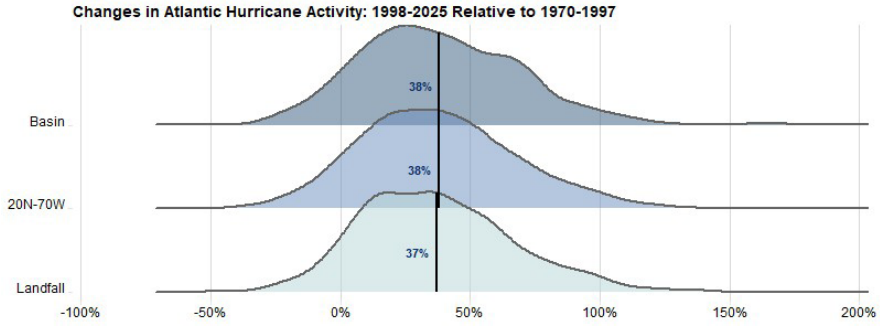
HURRICANE CONTINENTAL US LANDFALLS BY ENSO TYPE			
Hurricane Landfalls	Category 1 and above	Category 3 and above	Number of years
1970-1997	1.4 (1.1-1.8)	0.5 (0.3-0.8)	28
1998-2025	1.9 (1.2-2.6)	0.6 (0.3-1.0)	28

Looking more broadly at Atlantic hurricane activity, Figure 4 shows that the basin is in a more active era in the most recent years. This shift has commonly been linked to a combination of warmer North Atlantic sea-surface temperatures, reduced vertical wind shear, a strengthened West African monsoon, and generally more favorable conditions within the Main Development Region.

The increase in hurricane activity is remarkably consistent across the basin-wide, western Atlantic (northwest of 20°N-70°W), and U.S. landfall metrics. Compared with 1970-1997, activity during 1998-2025 increased by approximately 38% at both the basin-wide and western Atlantic scales, while U.S. hurricane landfalls increased by approximately 37% (Figure 4).

The broadly similar increases across the three metrics provide some indication that changes in track behavior are unlikely to be the primary driver of the higher U.S. landfall frequency.

FIGURE 4: ESTIMATED PERCENTAGE DIFFERENCES BETWEEN 1998-2025 AND 1970-1997 YEARS FOR ATLANTIC BASIN HURRICANE COUNTS, WESTERN ATLANTIC HURRICANE COUNTS (NORTHWEST OF 20°N-70°W), AND CONTINENTAL U.S. HURRICANE LANDFALLS.

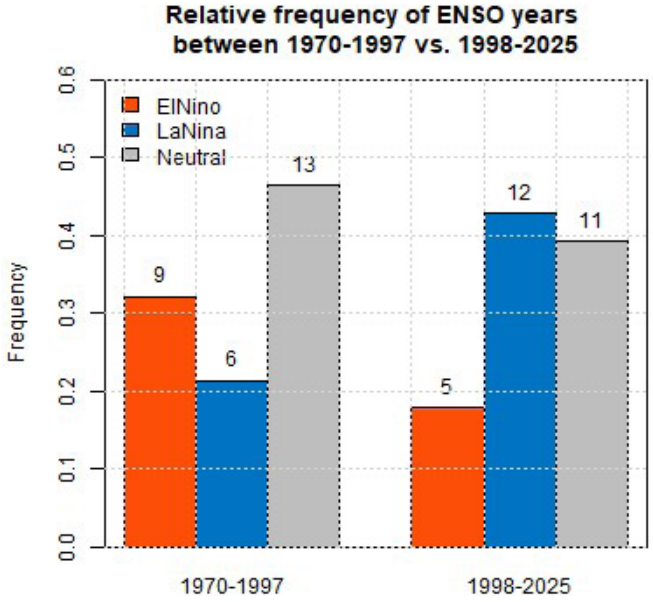


Vertical lines indicate the point estimates; shaded densities show their bootstrap sampling distributions. Wider distributions indicate greater uncertainty. Hurricane data from NOAA. Analysis and graphic: SCOR.

U.S. hurricane losses are highly sensitive to the occurrence of landfalling major hurricanes. Even modest changes in the frequency of major landfalls can produce substantial changes in insured losses because losses increase nonlinearly with storm intensity and location.

One possible explanation for the increase in Atlantic hurricane activity and losses since the mid-1990s is a change in the frequency of ENSO phases. As shown in Figure 5, the period since 1998 has been characterized by fewer El Niño years and a substantially higher occurrence of La Niña years compared with 1970-1997. Since La Niña conditions generally favor Atlantic hurricane development, this raises the question of whether the recent increase in hurricane activity and losses may be partly attributable to this shift in ENSO frequency.

FIGURE 5: RELATIVE FREQUENCY OF EL NIÑO, LA NIÑA, AND NEUTRAL ENSO PHASES DURING 1970-1997 AND 1998-2025, BASED ON THE NOAA RELATIVE OCEANIC NIÑO INDEX (RONI).



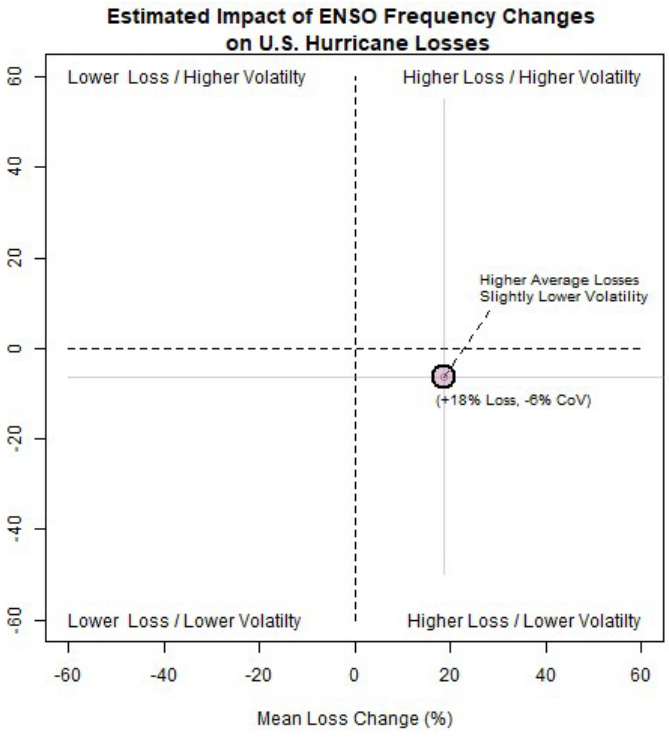
Compared to the earlier period, the recent period is characterized by fewer El Niño years and a substantially higher occurrence of La Niña years. Analysis and graphic: SCOR.

The recent prevalence of multi-year La Niña events has attracted considerable attention in the scientific literature.[11] However, scientists do not yet fully understand the mechanisms driving these changes, nor whether they are linked to anthropogenic climate change. Current evidence does not indicate a clear or consistent increase in the frequency or intensity of ENSO events as a result of global warming.

To explore the potential role of ENSO, a counterfactual analysis was performed in which the ENSO frequencies observed during 1998-2025 were replaced by those of the 1970-1997 period, while keeping the historical loss behavior within each ENSO phase unchanged. This experiment isolates the effect of the change in ENSO-phase frequency. It does not capture possible changes over time in the hazard or loss characteristics within each ENSO phase. The results are shown in Figure 6.

The analysis suggests that the higher prevalence of La Niña conditions since 1998 may have contributed to higher average hurricane losses and slightly lower loss volatility. These results are consistent with the increased prevalence of La Niña conditions during the recent period, which tend to favor higher Atlantic hurricane activity while producing more stable loss outcomes. However, the confidence intervals are wide, and the estimated effect is unlikely to explain more than a portion of the broader increase in hurricane activity and loss experience.

FIGURE 6: MEAN (X-AXIS) AND VOLATILITY (Y-AXIS) % CHANGE OF NORMALIZED U.S. TROPICAL CYCLONE LOSSES FOR THE PERIOD 1998 TO 2025 IN COMPARISON TO THE COUNTERFACTUAL SCENARIO.



The counterfactual scenario represents an experiment in which the ENSO phase frequencies observed during 1998-2025 are replaced by those of 1970-1997 while preserving the historical loss characteristics associated with each ENSO phase. Horizontal and vertical error bars show the 95% confidence intervals for the estimated mean loss change and volatility change, respectively, derived through bootstrap resampling. Data sources are NOAA (ENSO and hurricane data) and the Aon Catastrophe Insight Database (insured loss data). Analysis and graphic: SCOR.

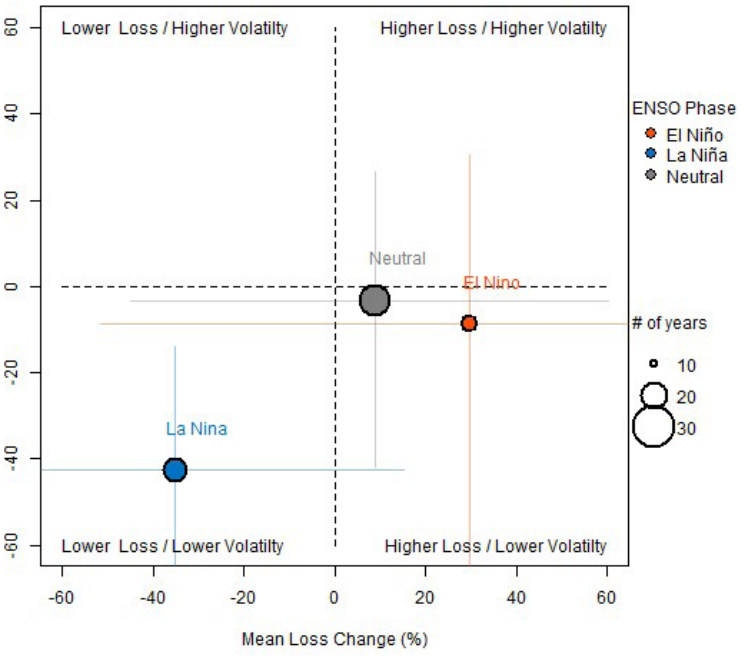
4. HOW DOES EL NIÑO IMPACT WESTERN NORTH PACIFIC TYPHOON LOSSES?

El Niño does not necessarily increase the number of Western North Pacific tropical cyclones, but it can favor the development of more intense storms. During El Niño years, tropical cyclones tend to form farther east over warmer waters, providing a longer period over favorable ocean conditions and increasing their potential to intensify. As a result, while overall cyclone counts may remain similar or even slightly lower, the frequency of typhoons and super typhoons is often higher.

The eastward shift in storm genesis also influences cyclone tracks. Compared with La Niña years, tropical cyclones formed farther east are more likely to recurve northward, increasing the risk of impacts in Japan and Korea while reducing the relative threat to parts of Southeast Asia, particularly the Philippines and Vietnam.

Consistent with these physical mechanisms, our analysis indicates that normalized Asia-Pacific typhoon insured losses during El Niño years are, on average, approximately 30% above the long-term mean (Figure 7). However, the historical relationship is subject to considerable uncertainty, reflecting the limited length of the observational record (1970 to 2025) and the disproportionate influence of a relatively small number of high-loss events.

FIGURE 7: MEAN CHANGE IN NORMALIZED ASIA-PACIFIC TROPICAL CYCLONE INSURED LOSSES (X-AXIS) AND RELATIVE LOSS VOLATILITY (Y-AXIS) BY ENSO PHASE, COMPARED WITH THE LONG-TERM AVERAGE.



Bubble size indicates the number of years within each ENSO phase classification. Horizontal and vertical error bars show the 95% confidence intervals for the estimated mean loss change and volatility change, respectively, derived through bootstrap resampling. Data sources are NOAA (ENSO and hurricane data) and the Aon Catastrophe Insight Database (insured loss data). Analysis and graphic: SCOR.

5. HOW DOES EL NIÑO INFLUENCE U.S. SEVERE CONVECTIVE STORM, FLOOD, AND WILDFIRE LOSSES?

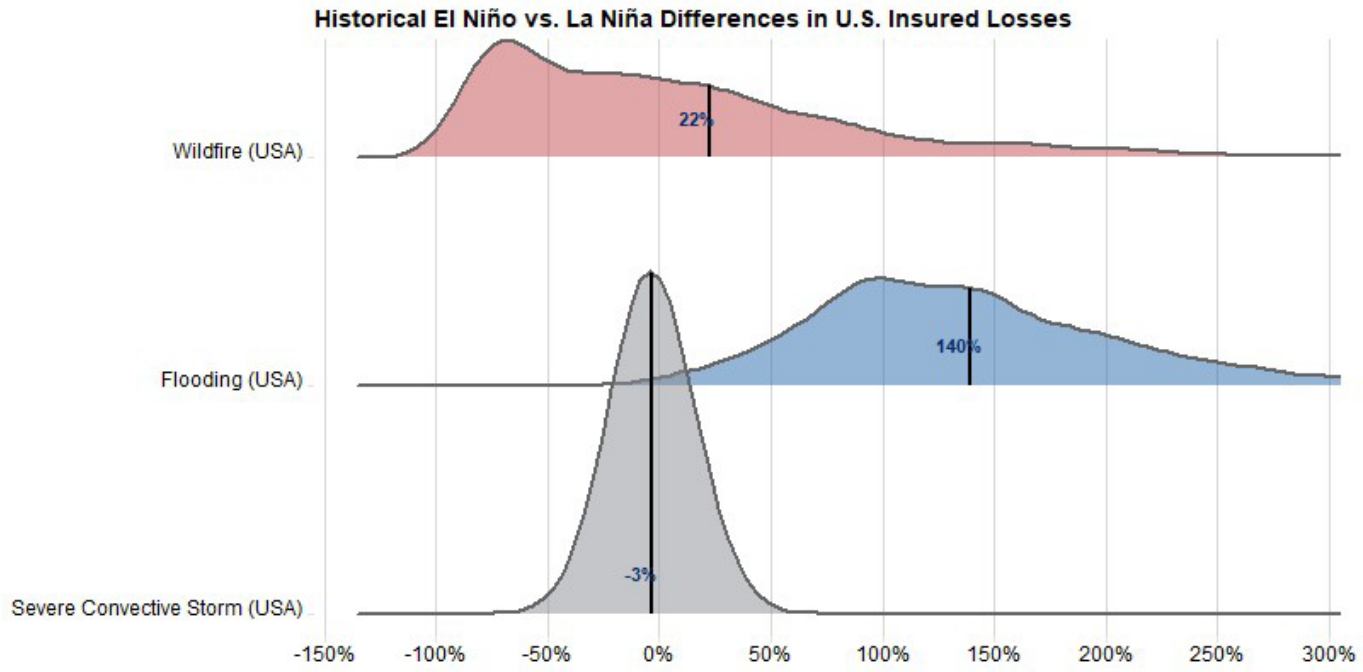
Beyond hurricanes, ENSO also influences several other U.S. natural catastrophe perils through its effects on atmospheric circulation, precipitation patterns, and temperature.

For **Severe Convective Storms (SCS)**, El Niño generally reduces the availability of the warm, moist Gulf air that fuels severe thunderstorms, resulting in a lower likelihood of hail, tornado, and damaging wind events. This influence is most evident during spring and is typically linked to the ENSO conditions prevailing during the preceding winter. However, translating changes in hazard into changes in insured losses is far from straightforward. While some studies suggest that industry-wide SCS losses tend to be lower during El Niño years,[12] our analysis finds negligible difference between El Niño and La Niña years (Figure 8). The relatively narrow uncertainty range compared with other catastrophe perils reflects the large number of SCS events occurring each year.

ENSO also affects **flood risk** through its influence on precipitation patterns. During El Niño years, the jet stream typically shifts southward, increasing precipitation across large parts of the southern United States and elevating flood potential. Consistent with this mechanism and previous studies[13] [14] showing increased flood frequency and insured flood losses in parts of the United States during El Niño conditions, our analysis identifies a pronounced ENSO signal in historical U.S. flood losses. Average normalized U.S. flood losses during El Niño years are estimated to be substantially higher (+140%) than during La Niña years (Figure 8). The January-March RONI index was used in this analysis because it captures both the peak ENSO influence on U.S. precipitation and the antecedent hydrological conditions that can contribute to flood losses in subsequent months.

FIGURE 8: ESTIMATED PERCENTAGE DIFFERENCES BETWEEN EL NIÑO AND LA NIÑA YEARS FOR NORMALIZED U.S. WILDFIRE (TOP), FLOOD (MIDDLE), AND SEVERE CONVECTIVE STORM (BOTTOM) LOSSES.

ENSO phase is defined by the seasonal RONI index: January-February-March for Severe Convective Storm and Flood, and August-September-October for Wildfire. Vertical lines indicate the point estimates; shaded densities show their bootstrap sampling distributions. Wider distributions indicate greater uncertainty. Data sources are NOAA (ENSO classification) and the Aon Catastrophe Insight Database (insured loss data from 1970 to 2025). Analysis and graphic: SCOR



For **wildfires**, the historical ENSO signal appears weak. While El Niño conditions generally favor wetter conditions and reduced wildfire activity in parts of the United States, this influence is not clearly reflected in aggregate insured losses. Wildfire losses are affected by a range of additional factors, including fuel buildup, land management practices, and the timing and location of individual extreme events.

As a result, our analysis finds a modest increase in normalized wildfire losses during El Niño years (+22% relative to La Niña years), and the relationship is not statistically significant. Major wildfire losses can still occur during El Niño conditions, as demonstrated by the 2018 Camp Fire in California, which occurred during a strengthening El Niño episode.[15]

6. OTHER REGIONAL IMPACTS OF EL NIÑO

Beyond North America and the Western Pacific, El Niño influences weather patterns across several regions, creating both flood and drought risks.

In Latin America, El Niño is typically associated with enhanced rainfall and flooding along parts of the Pacific coast and southeastern South America. The 2017 "Coastal El Niño" in Peru and Ecuador[16] illustrates the potential severity of these impacts, with heavy rainfall, flooding, and landslides causing economic losses estimated at USD 1-2 billion. Importantly, such events are often linked to localized warming in the eastern Pacific rather than basin-wide ENSO conditions, making them difficult to capture in seasonal forecasts.

Across Southeast Asia and the Maritime Continent, El Niño generally leads to drier and warmer conditions as tropical convection shifts eastward toward the central and eastern Pacific. As a result, regions such as Indonesia, Malaysia, the Philippines, and Papua New Guinea frequently experience below-average rainfall, particularly during the June-August period. The opposite pattern is typically observed during La Niña years, when wetter-than-average conditions prevail across much of the region.

ENSO may also influence European windstorm activity through changes in large-scale atmospheric circulation and the North Atlantic storm track. However, this teleconnection is considerably weaker than those observed in the Americas, and any impact on European windstorm frequency or losses remains uncertain. Australia is particularly sensitive to ENSO conditions.[17] El Niño events are typically associated with below-average rainfall and warmer temperatures across eastern and northern Australia, increasing the risk of drought, agricultural losses, and elevated wildfire potential. Conversely, La Niña conditions generally favor wetter-than-average conditions and increased flood risk across large parts of the continent. However, local impacts can vary substantially depending on regional climate conditions and the timing and intensity of ENSO development.



ENDNOTES

1 Interestingly, the Atlantic hosts an ENSO-like mode as well, but it is significantly weaker and more regional than its Pacific counterpart.
2 RONI is an ENSO index developed by the NOAA Climate Prediction Center (CPC). Details of its calculation are available in the NOAA CPC documentation on the Relative Oceanic Niño Index (see link)
3 https://cpc.ncep.noaa.gov/products/analysis_monitoring/enso/roni/strengths/
4 https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso/roni/outlook/
5 https://www.noaa.gov/news-release/noaa-maintains-prediction-for-below-normal-atlantic-hurricane-season
6 https://www.ajg.com/gallagherre/news-and-insights/what-to-expect-for-the-2026-hurricane-season/?utm_campaign=Gallagher+Re+&utm_medium=social&utm_source=linkedin
7 https://www.tropicalstormrisk.com/docs/TSRNWPForecastJuly2026.pdf
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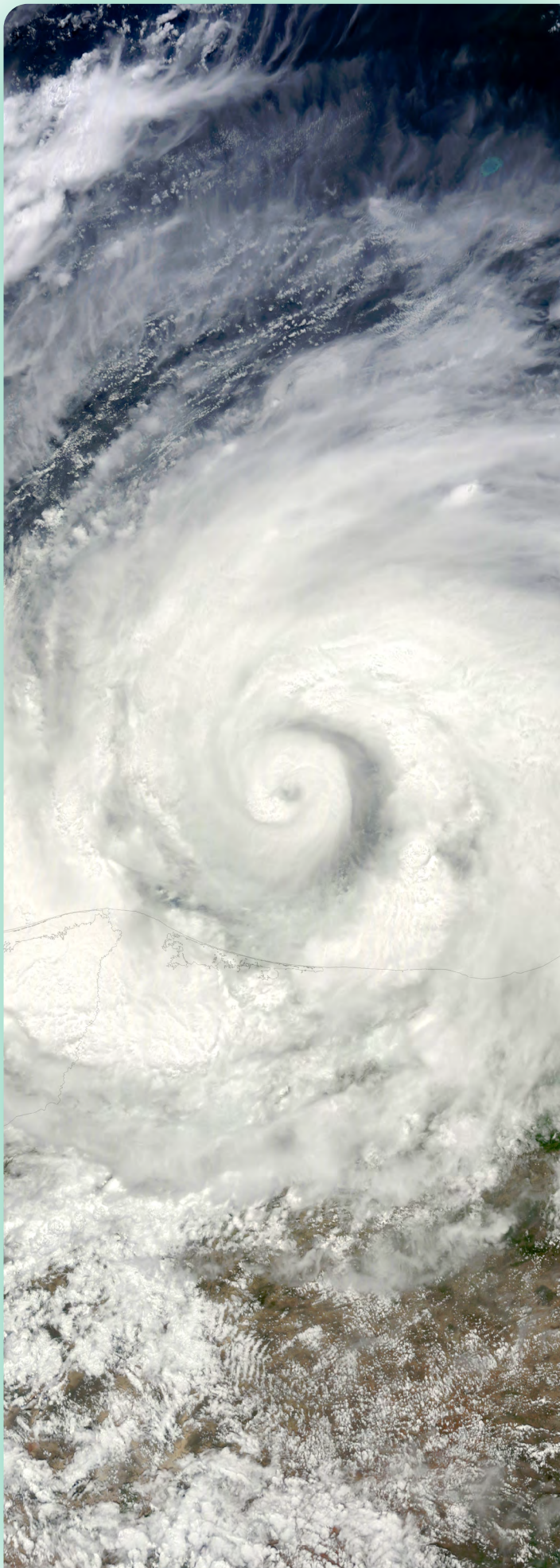

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