



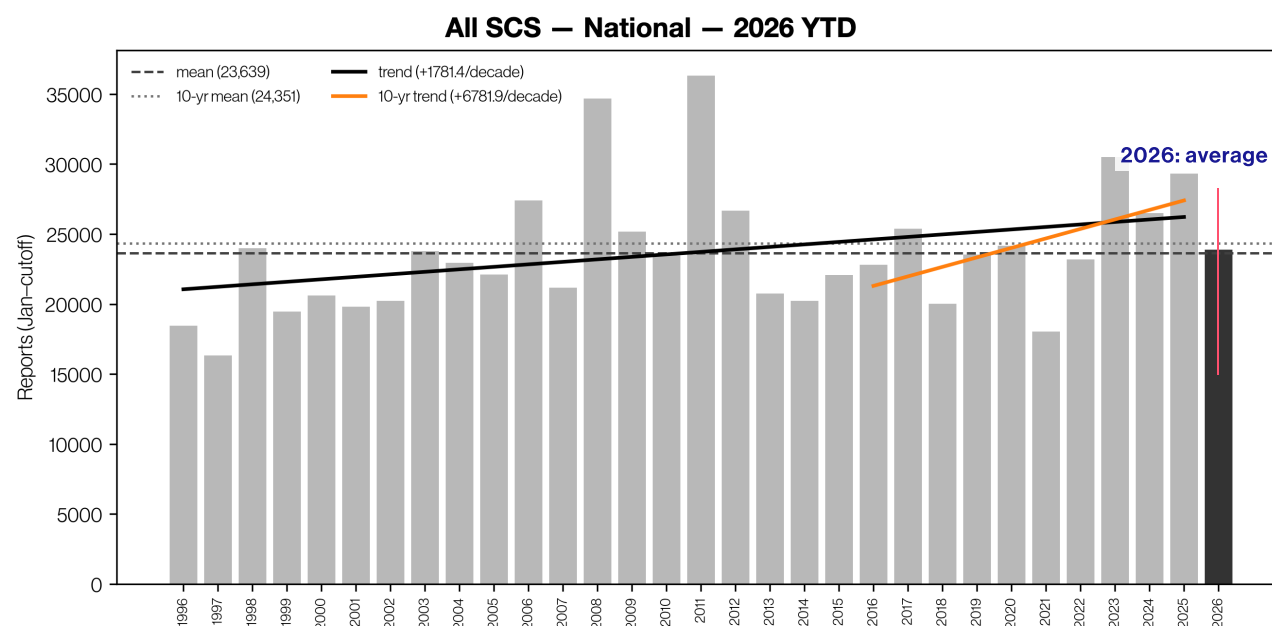
2026 YEAR-TO-DATE SEVERE WEATHER REVIEW

The average SCS
year that **wasn't**.

thedemexgroup.com

THEME 01 · NATIONAL, YEAR TO DATE

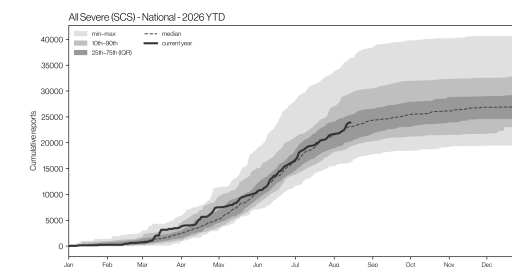
The average year that wasn't for Severe Convective Storms (SCS).



2026 YTD DEPARTURE FROM AVERAGE

+1%

WITHIN THE SEASON



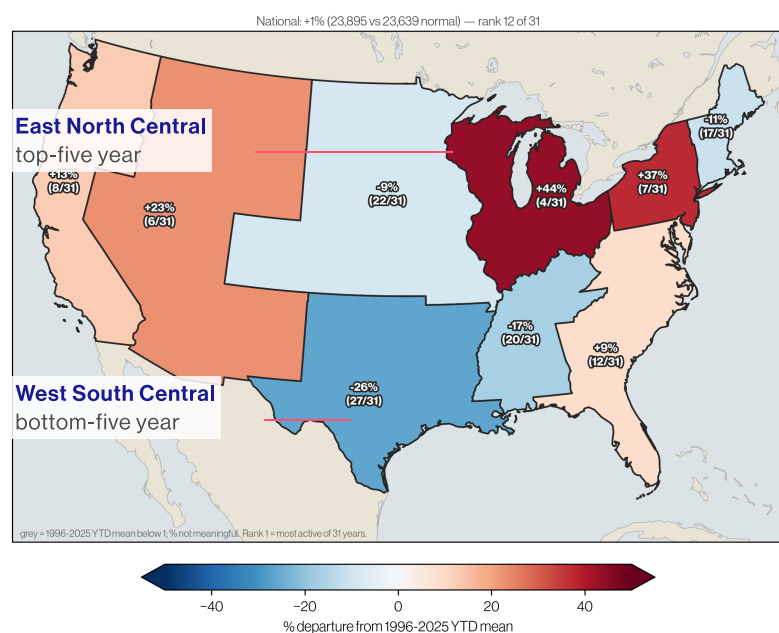
2026 tracked the median band all season.

Severe convective storms — hail, thunderstorm wind and tornadoes — by year (Jan through mid-Aug).

Ranked against 31 years including 2026; percent departure measured against the 30 completed years 1996–2025 · Jan–Apr NCEI Storm Events, May–Aug 14 SPC preliminary

THEME 02 · REGIONAL BREAKDOWN, YEAR TO DATE

The national number is an average of **extremes**.



CONUS is 1% above average, but regionality matters

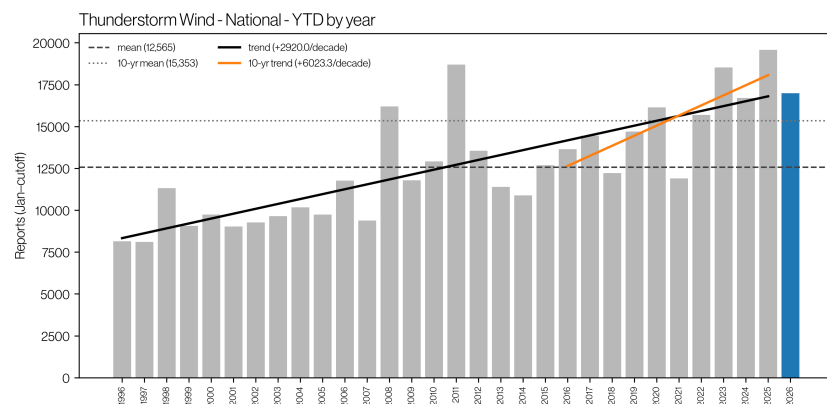
THE SAME +1% YEAR, BY CENSUS DIVISION

DIVISION	% DEPARTURE FROM NORMAL	ANNUAL RANK(YEARS)
East North Central	+44.0%	4 / 31
Middle Atlantic	+37.2%	7 / 31
Mountain	+22.9%	6 / 31
Pacific	+12.8%	8 / 31
South Atlantic	+9.3%	12 / 31
West North Central	-9.0%	22 / 31
New England	-11.0%	17 / 31
East South Central	-16.6%	20 / 31
West South Central	-26.5%	27 / 31

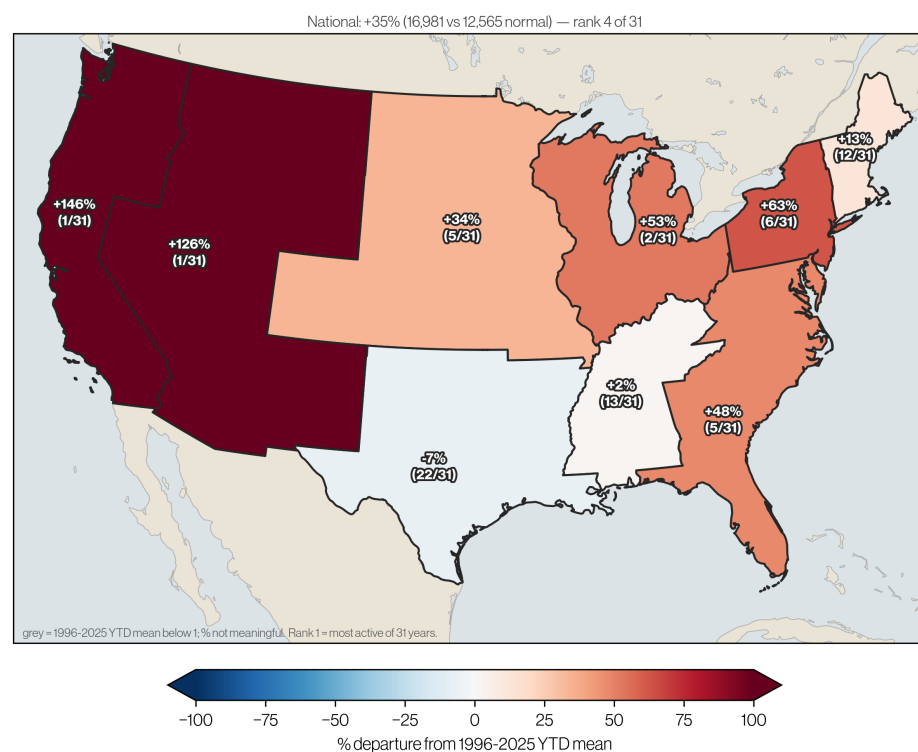
Ranked against 31 years including 2026; percent departure measured against the 30 completed years 1996–2025 · Jan–Apr NCEI Storm Events, May–Present SPC preliminary

THEME 03 · THUNDERSTORM WIND

Thunderstorm wind: thirty years up, and +35% this year.

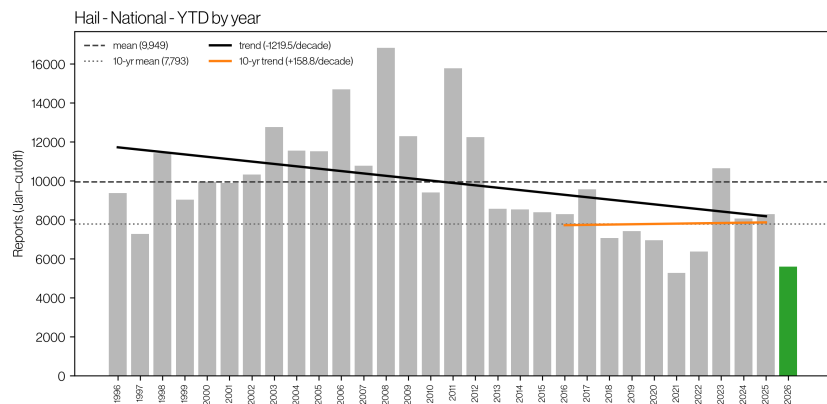


- Trend **+2,920 reports / decade** · rank 4 (out of 31 years)
- Highest increases so far across the far west
- Below normal in South Central Plains

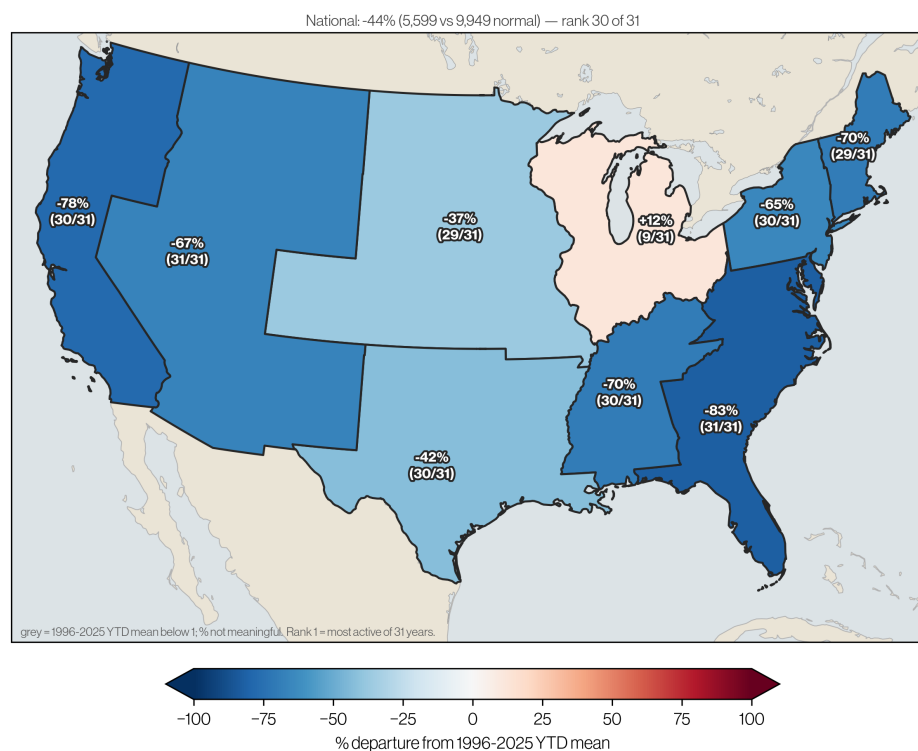


THEME 03 · HAIL

Hail: thirty years down, and **-44% this year.**



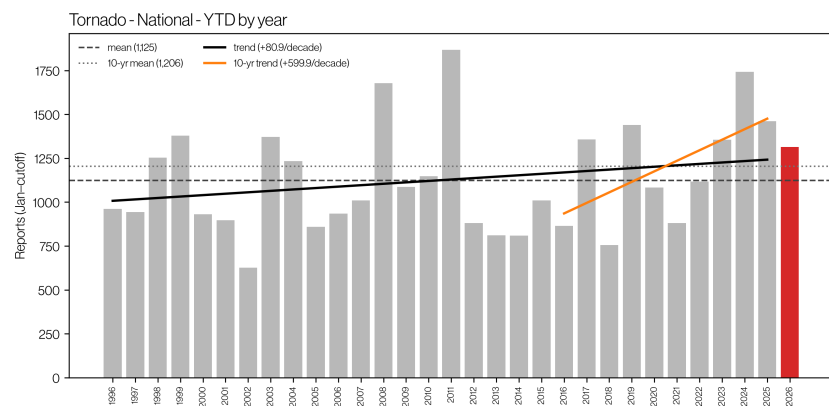
- Trend **-1,220 / decade** · rank 30 (out of 31 years)
- All regions running below normal except for Great Lakes
- Lowest amount* of hail records in Southeast



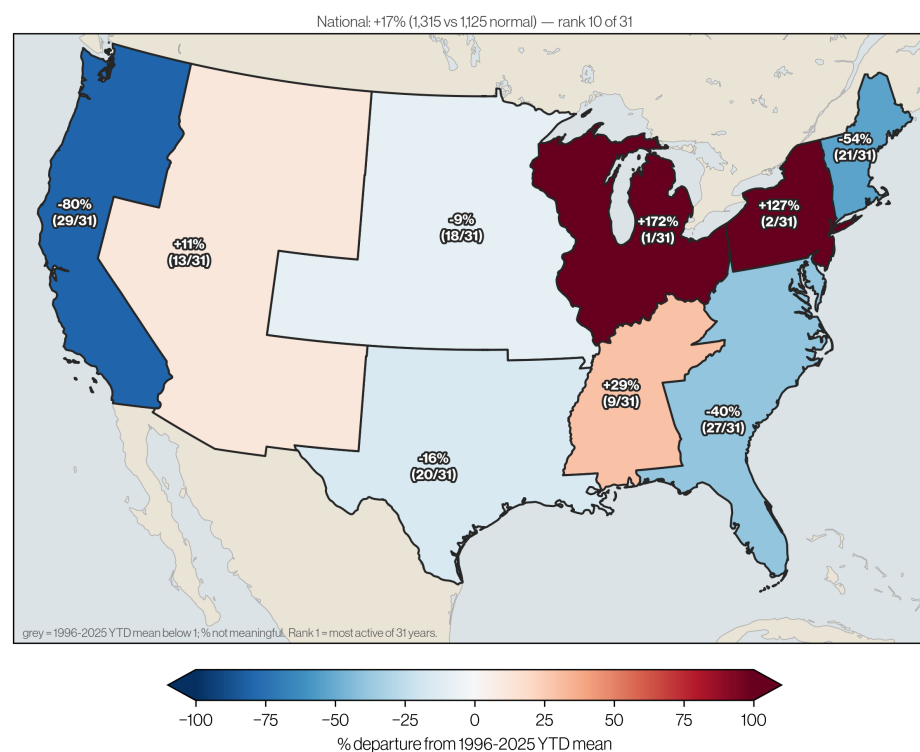
Hail reports · Jan–Apr NCEI Storm Events, May–Aug 14 SPC preliminary · Departure is versus the 1996–2025 year-to-date mean · Hail is the noisiest field in preliminary reporting

THEME 03 · TORNADO

Tornado: three decades flat, and +17% this year.

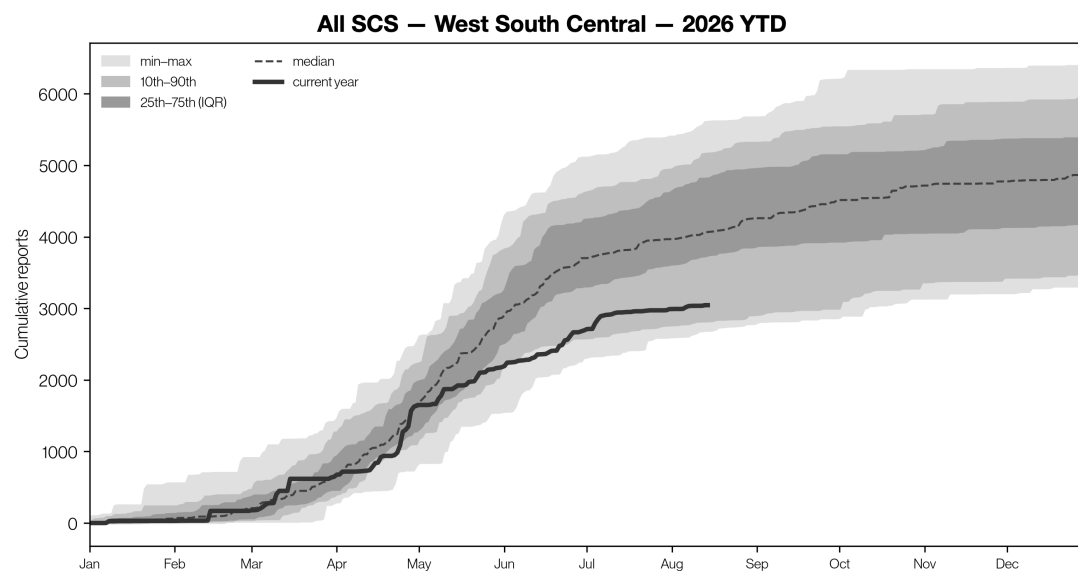


- Trend **+81 / decade** · rank 10 (out of 31 years)
- Significant tornado activity in Ohio River valley eastward to Middle Atlantic
- Suppressed activity in central plains



THEME 04 · WEST SOUTH CENTRAL · TEXAS, OKLAHOMA, ARKANSAS, LOUISIANA

A bottom-five year for Southern Central Plains

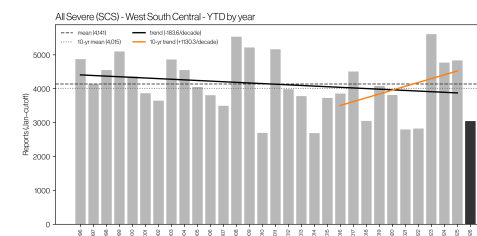


Overall running below normal.

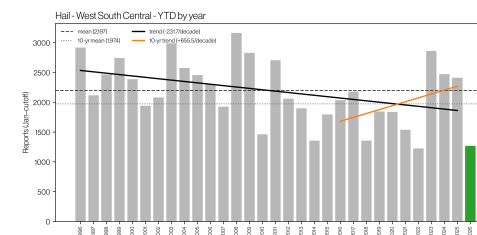
Hail counts are much below normal for this time of year, especially relative to 10-year trend

-26%

SEVERE CONVECTIVE STORMS, 31 YEARS

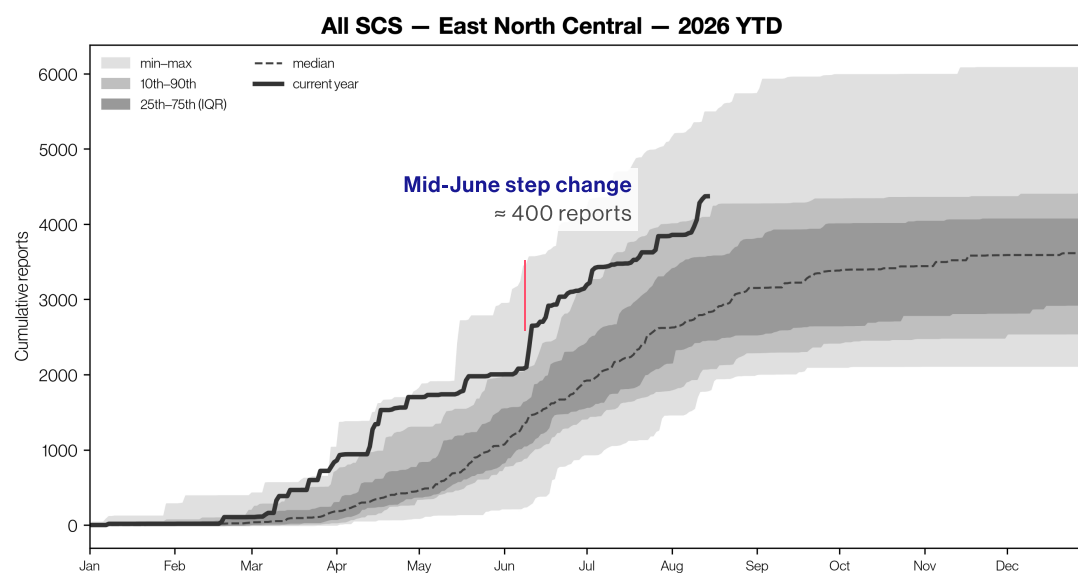


HAIL · -42% · -232 / DECADE



THEME 04 · EAST NORTH CENTRAL · ILLINOIS, INDIANA, MICHIGAN, OHIO, WISCONSIN

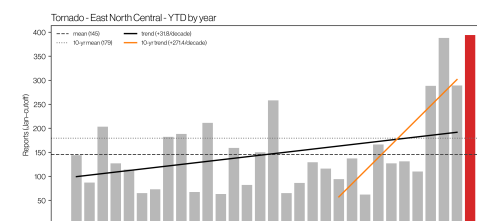
The mirror image — A top-five year for Upper Midwest



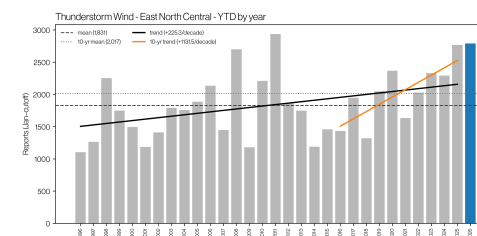
Thunderstorm wind supplied 72% of the surplus, tornado 19%, hail 9%. **The only division in the country with hail above normal (+11.9%).**

+44%

TORNADO · +172% · RANK 1 OF 31



THUNDERSTORM WIND · +53% · RANK 2 OF 31

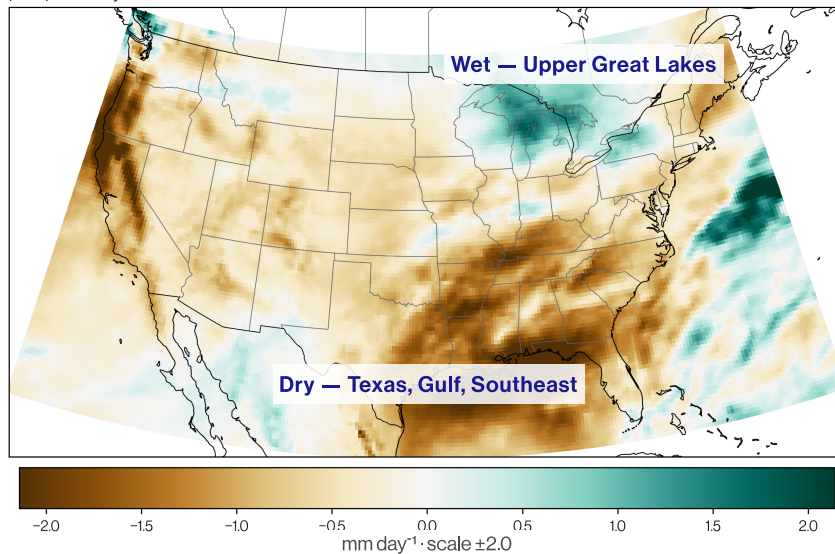


CLIMATE DRIVERS · MOISTURE

The storm track sat north of where it usually sits.

WINTER · JANUARY–MARCH

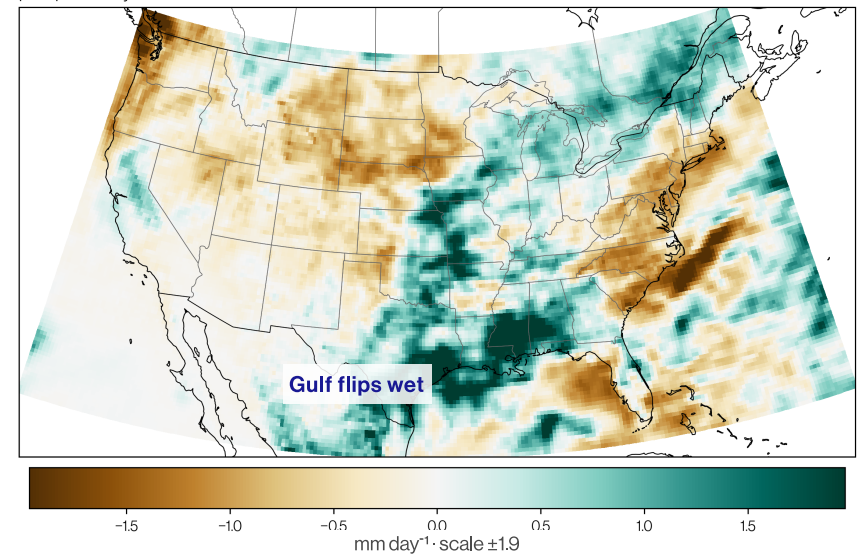
precip anomaly — JFM 2026 vs 1991–2020



The dipole that set up both regional stories, at its sharpest. The wet anomaly sits on East North Central, the dry anomaly on West South Central.

SPRING · APRIL–JUNE

precip anomaly — AMJ 2026 vs 1991–2020



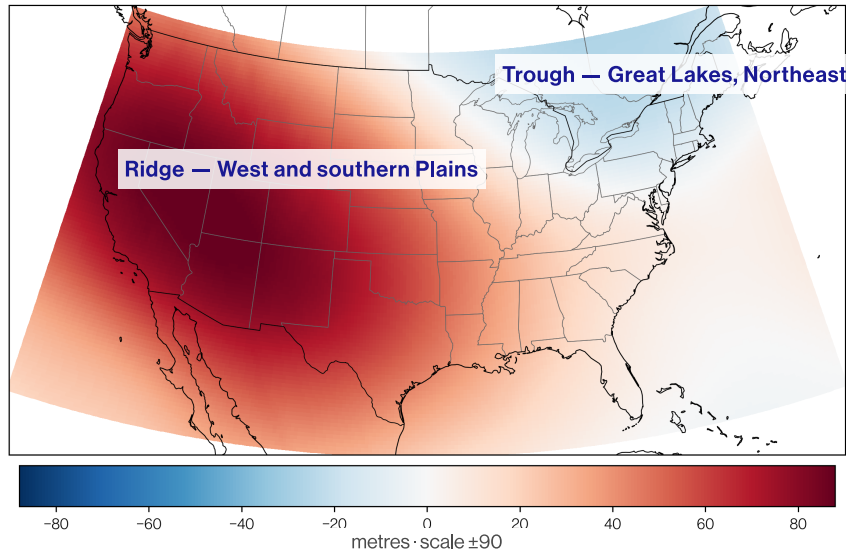
The moisture returned to Texas and Louisiana; **the severe weather did not come back with it**. The Great Lakes stayed wet through both seasons.

CLIMATE DRIVERS · STEERING FLOW

The ridge that caused it slid east for severe season.

WINTER · JANUARY-MARCH

z500 anomaly — JFM 2026 vs 1991–2020

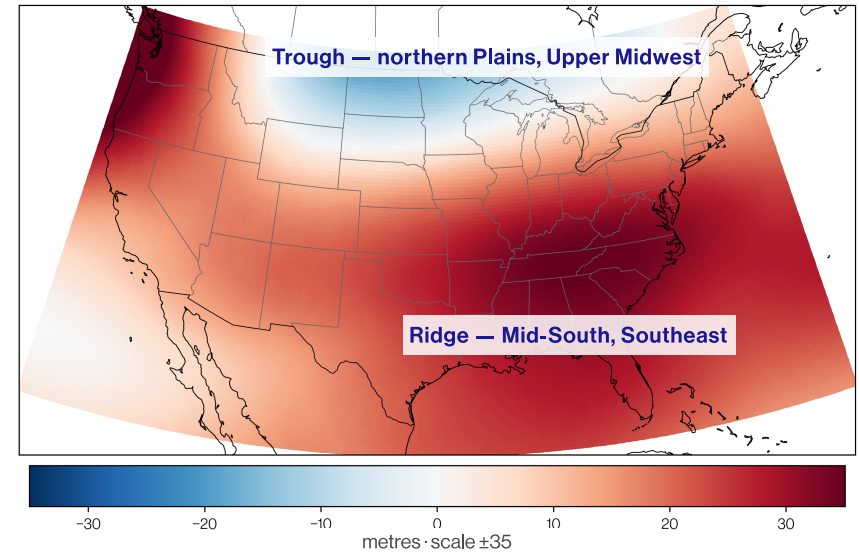


Western ridge, eastern trough — the configuration that blocks Gulf moisture return into Texas. The dynamics behind the winter precipitation dipole.

ERA-5 500 hPa geopotential height vs. 1991–2020. The two panels are on different colour scales — compare patterns, not shades · ERA-5 covers Jan–Jul; storm reports run through Aug 14

SPRING · APRIL-JUNE

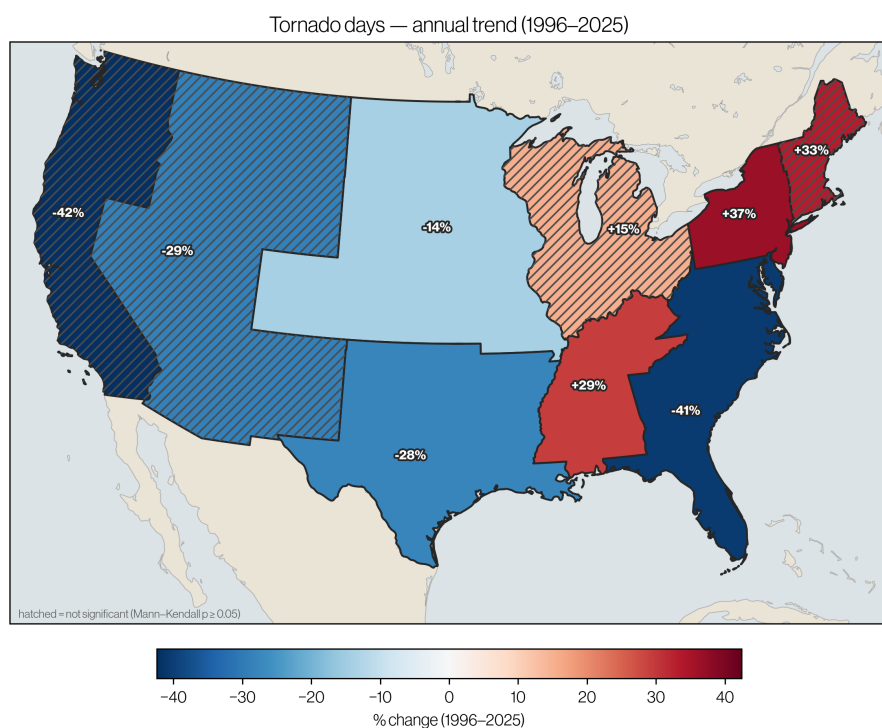
z500 anomaly — AMJ 2026 vs 1991–2020



Weaker, and relocated. The cap moves onto the Southeast, the trough onto the Great Lakes — **the moisture returned, the steering flow did not.**

THEME 05 · ARE THESE WEATHER TRENDS REAL?

Tornado day count is flat nationally. The regional map is not.



SIGNIFICANT CHANGE, 1996–2025

Middle Atlantic	+37%
East South Central — the Mid-South	+29%
West South Central	-28%
West North Central	-14%
South Atlantic	-41%

Tornado alley has shifted southeast — the Mid-South up, the Plains down. The Middle Atlantic increase is the part that gets less attention.

The Great Lakes at **+15%** and New England at **+33%** point the same way but are hatched — directional, not yet significant.

Nationally the tornado-day count is roughly flat. **What changed is where they happen** — a slow revaluation of a book that has not moved.

Percent change in annual tornado days by Census division, 1996–2025 · Hatched = not significant at Mann-Kendall $p \geq 0.05$ · Tornado days are used rather than counts to limit reporting bias

CONCLUSIONS · 2026 YTD WEATHER

Three key points:

01 · NATIONAL VIEW HIDES INFORMATION

+1%

A national figure made of a **44% hail deficit** and a **record high-wind year** cancelling in the count. Regional weather was not "plus one percent".

02 · REGIONAL AND SUBPERIL VIEWS MATTER (A LOT)

70 point spread

Between East North Central at **+44%** and West South Central at **-26%** — an evolving storm track can relocate SCS weather activity during the year

03 · SCS ACTIVITY IS MIGRATING

Regional Focus

Tornado days are flat nationally, but moving **southeast and northeast** and out of the Plains.

Custom-calibrated, SCS modeling and reinsurance is best suited for the unique exposures of an insurer

SECTION 02 • AN INSURED LOSS PERSPECTIVE

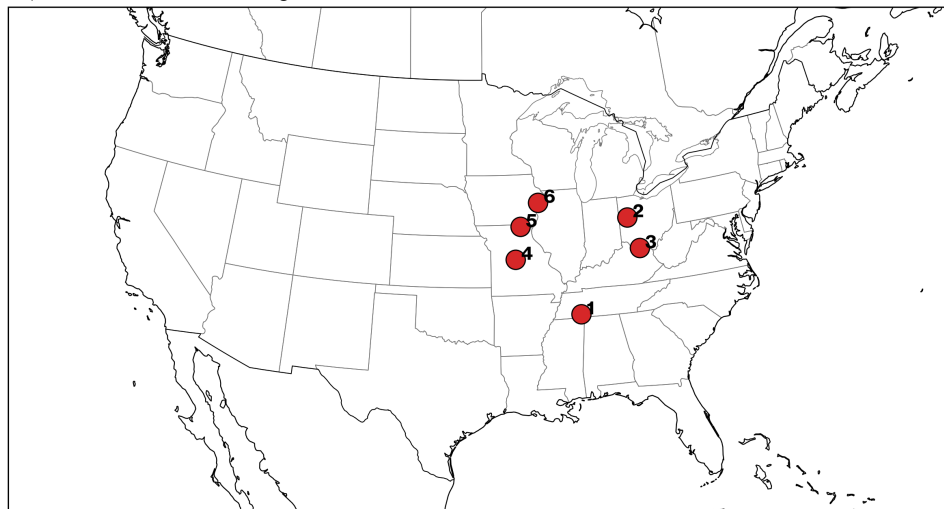
02

Insured loss was
not plus one percent.

A national average does not represent a unique exposure
footprint

A national perspective doesn't capture a cedent's unique exposure footprint

Top-6 events - 2026 YTD through 2026-08-14



The six largest events of the year, ranked. All in the Mid-South, Ohio Valley and mid-Mississippi Valley — **none in the southern Plains hail corridor**, which independently corroborates the West South Central story.

WHAT THE NATIONAL AVERAGE CONCEALED

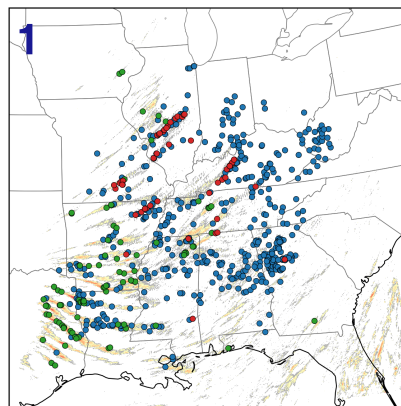
70 pts of weather anomaly spread between regions

0 of 9 Census divisions experienced average weather.

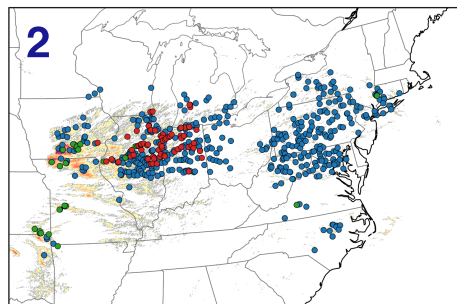
6 of 6 of the year's largest events fell in one part of the country.

The Demex Proxy Claims Index is calibrated to the individual insurer — its ground-up claims history and exposure modeled against regional weather— rather than a national or industry model or index.

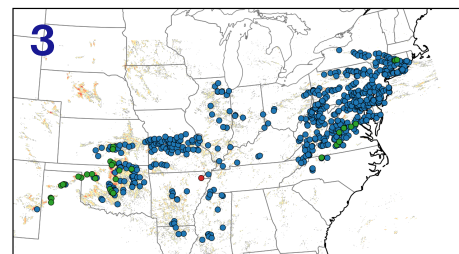
Mar 15 T54/H92/W497



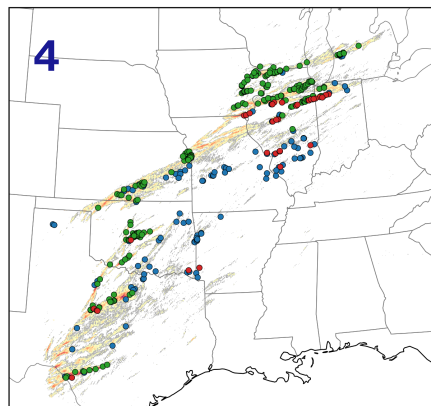
Jun 11 T66/H26/W479



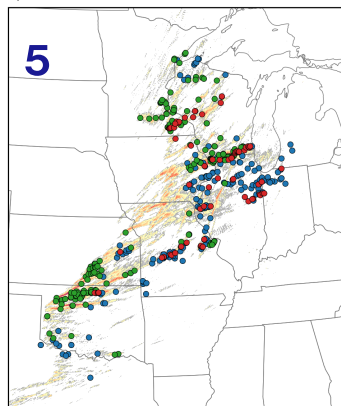
Jul 04 T1/H33/W590



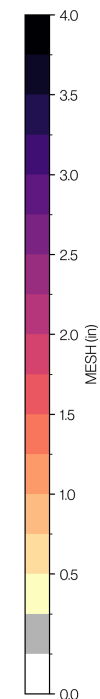
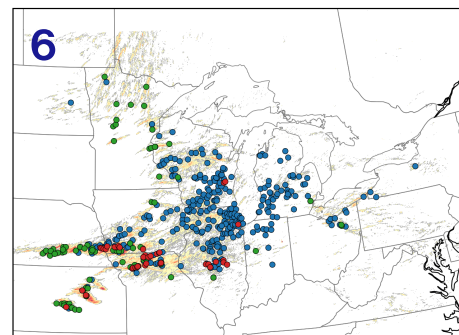
Mar 10 T37/H268/W112



Apr 17 T77/H198/W178



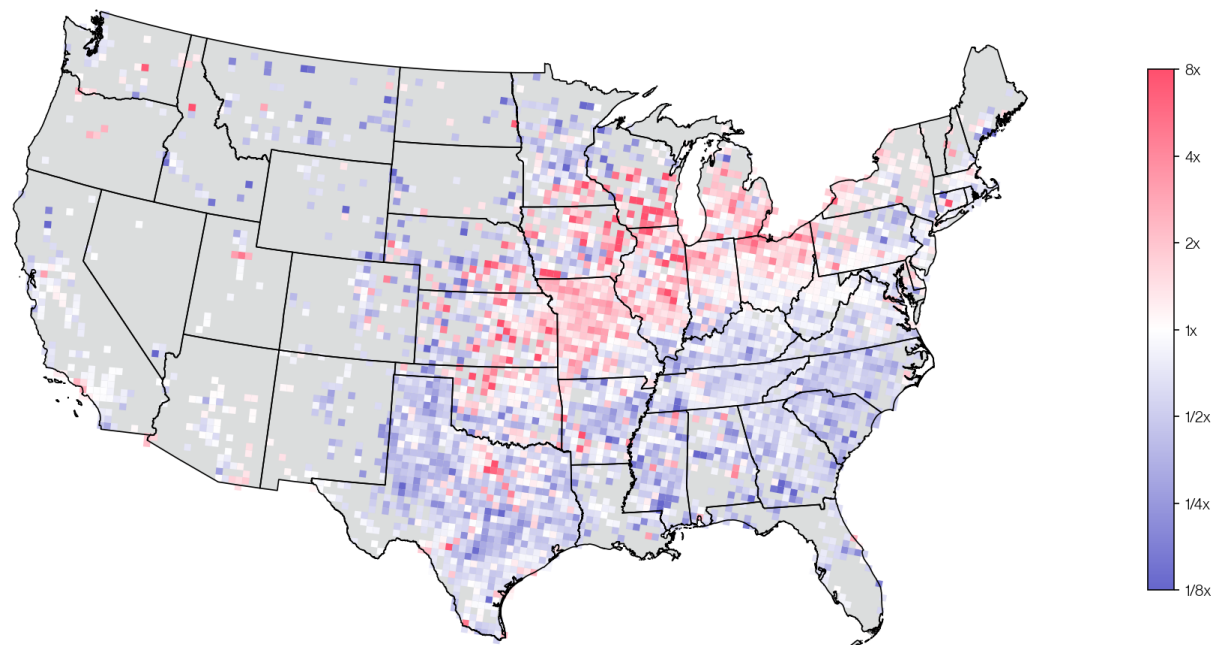
Jun 10 T42/H79/W349



● Tornado report ● Hail report ● Wind report

Six highest-ranked severe weather days, 2026 through Aug 14 · Reports: NCEI Storm Events and SPC preliminary · MESH: radar-derived maximum estimated hail size, in inches

Our modeled cedents saw insured loss in a common region.



KEY INSURED LOSS REGIONS

Midwest and Ohio Valley

The **highest modeled losses** across the cedents are concentrated in a southwest-to-northeast corridor running from Oklahoma across Illinois and Indiana to western Pennsylvania.

Cedents in Texas, the western Gulf South and most of the Southeast show **the lowest modeled losses** — reflecting the lower-than-average weather activity that occurred in the region.

SECTION 02 · DETAILED MODELING MATTERS

Detailed modeling highlights localized loss activity.

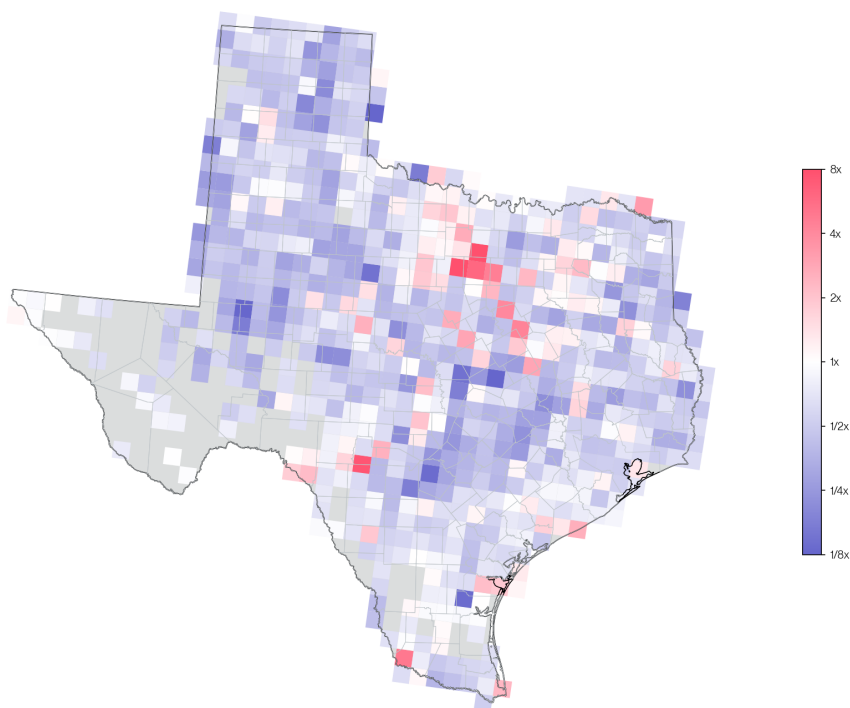
TEXAS, AT GRID RESOLUTION

–26% storm reports state-wide.
Up to 8× 10yr avg loss locally.

Texas has been quiet on average: storm reports 26% below normal, modeled loss below average across most of the state.

However, individual grid cells run **2× to 8× average loss** — depending upon the exposure footprint and ground truth weather that occurred

Because the Proxy Claims Index is calculated per location and calibrated against each insurer's own exposure and loss, **SCS Reinsurance responds as intended.**



SECTION 02 · INSURED LOSS

Skillful prediction and transfer of SCS and Winter Storm loss requires cedent-calibrated modeling

Ground truth
weather

Ground-up
claims history

Projected
exposures
(T&Cs)

Demex will build you a free, 2027 insured loss model for SCS and Winter Storms

Contact: Charlie Eadie, Chief Growth Officer, charlie.eadie@thedemexgroup.com