

# Effect of Global Land & Sea Temperature on Cyclonic Storms

By Glen Dale Davis

DATA 608

# An Average Year from 1980-2022

Was **0.53°C** hotter than the 30-yr moving average

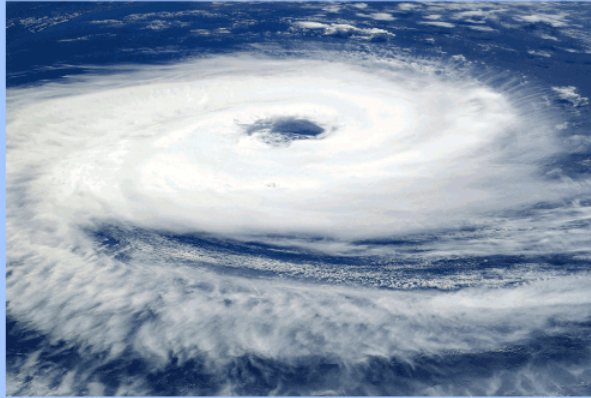
Had **46** hurricanes and typhoons globally

Had **1125** tornadoes in the US

Had **39** fatalities and **\$914,700,000** in property loss from tornadoes in the US

# Hurricane vs Tornado

## HURRICANE



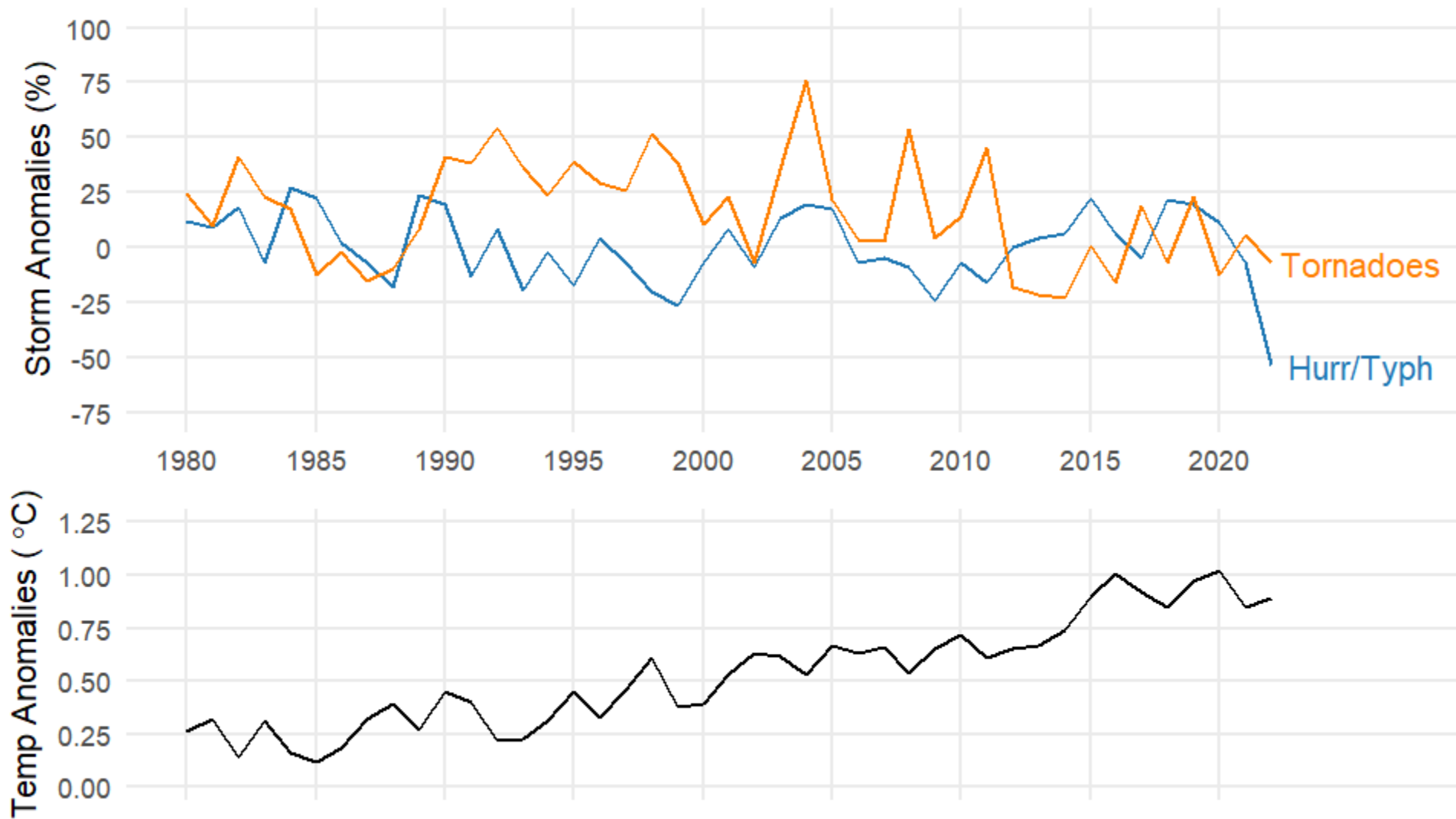
- Forms over water
- Huge: 60-1000 miles across
- Wind speed usually less than 180 mph
- Last up to three weeks
- Several days warning
- Less than 100 tropical cyclones annually

## TORNADO

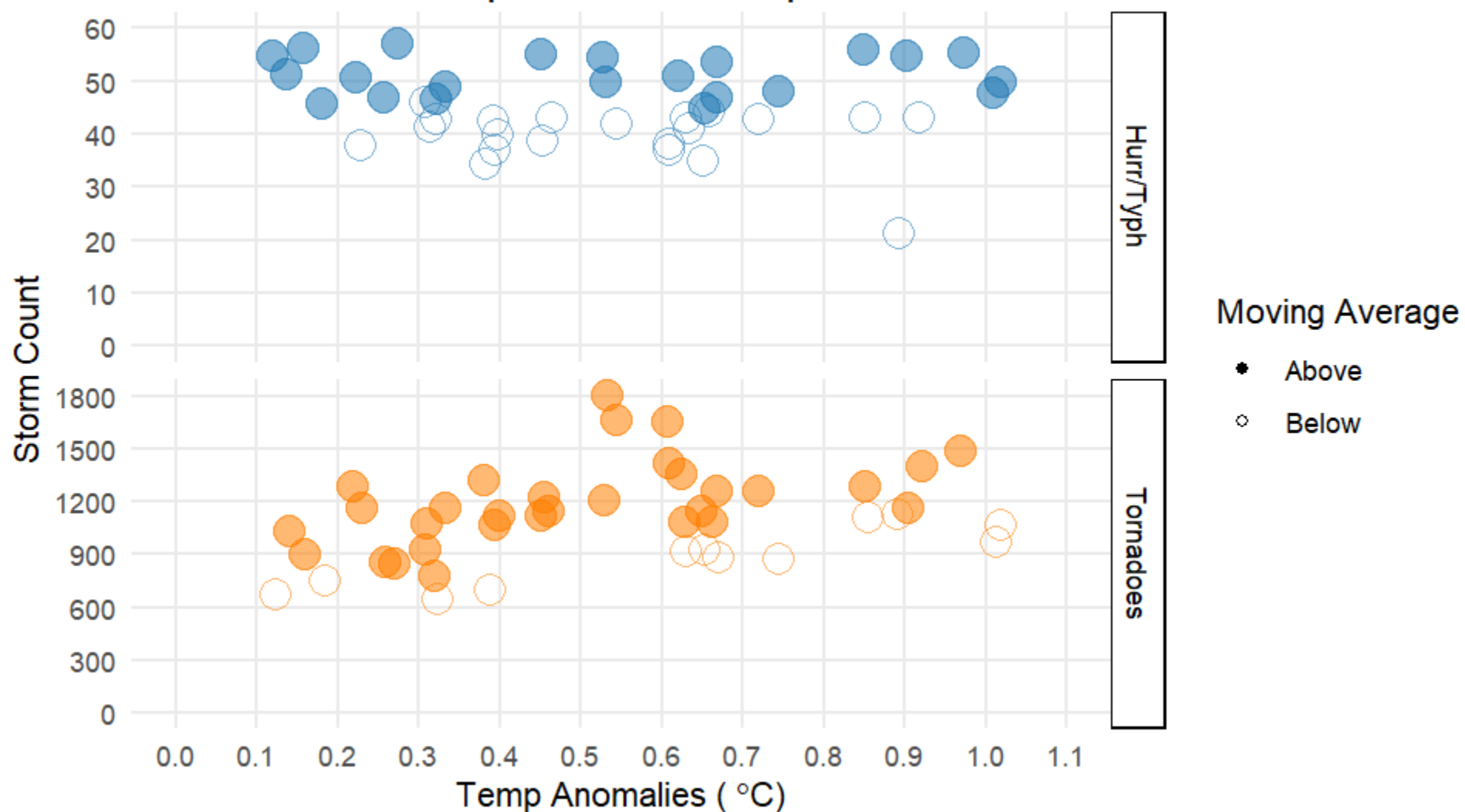


- Forms over land
- Smaller: A few feet up to 2 miles across
- Wind speed up to 300 mph
- Lasts minutes up to a couple hours
- Minutes of warning
- More than 2000 tornado per year globally

## Gap Between Global Land/Sea Temp & 30-Yr Average Grows While Tornado & Hurricane/Typhoon Occurrence Against 30-Yr Average Oscillates



# Most Years Had Above Average Storm Counts, but There Is No Positive Linear Relationship Between Temp Anomalies & Storm Counts



# Storm Damage Can Be Severe



Above: Homes left destroyed after storm surge from Hurricane Nicole in Wilbur-by-the-Sea, Fla., last year. Credit: Zack Wittman for The New York Times



Above: People picking through the rubble after a tornado destroyed much of Rolling Fork, Miss. Credit: Rory Doyle for The New York Times



## Tornadoes Kill Fewer than 80 People in Most Years, but Some Years Have Been Particularly Deadly with Big Outbreaks in Certain States

