

2018 EDITION

Thunderstorms





How does your severe weather form?

The air cools as it rises.
Water vapor condenses and
forms cumulus clouds. When
condensation occurs, heat is
released and helps the
thunderstorm grow. At
some point, condensation
high in the cloud and falls to
the ground as rain.






What conditions are needed for it to form?


All thunderstorms, severe or not, must have three conditions present in order to develop. The first needed thing is moisture in the lower and mid levels of the atmosphere. As air rises in a thunderstorm updraft, moisture condenses into small water drop which form clouds then precipitation happens.






When and where does this weather event most frequently occur?


A thunderstorm is classified as "severe" when it contains one or more of the following: hail one inch or greater, winds gusting in excess of 50 knots (57.5 mph), or a tornado.






Is there a scale used to measure the intensity of your weather event?


Tornado intensity can be measured by in situ or remote sensing measurements, but since these are impractical for wide scale use, intensity is usually inferred via proxies, such as damage. The Fujita scale and the Enhanced Fujita scale rate tornadoes by the damage caused.






How is your weather event named or classified?

It is not easy to measure wind speed in a tornado. ... This system is called the F-Scale or Fujita Scale; it classifies tornadoes by their estimated wind speed, which is determined by looking at how strong the wind must have been to cause the resulting damage. Tornadoes are classified into five categories, F-0 through F-5.







WHAT TECHNOLOGY IS USED TO MONITOR YOUR WEATHER EVENT?





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WHAT ARE SOME FAMOUS EXAMPLES OF YOUR SEVERE WEATHER HAZARD?




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1. The "Tri-State Tornado" killed 695 people and injured 2,027, traveling more than 300 miles through Missouri, Illinois and Indiana on March 18, 1925. It was rated an F5 at the top of the old Fujita scale (with winds of 260-plus mph).
 2. The "Natchez Tornado" killed 317 people and injured 109 on May 6, 1840, along the Mississippi River in Louisiana and Mississippi. The official death toll may not have included slaves, according to the Federal Emergency Management Agency.



HOW DOES ONE PREPARE FOR YOUR WEATHER HAZARD?




Before Thunderstorm and Lightning. To prepare for a thunderstorm, you should do the following: To begin preparing, you should build an emergency kit and make a family communications plan. Remove dead or rotting trees and branches that could fall and cause injury or damage during a severe thunderstorm.








WHAT EFFECTS SHOULD SOMEONE EXPECT FROM THIS TYPE OF STORM?



Some of the most severe weather occurs when a single thunderstorm affects one location for an extended time. Thunderstorms can bring heavy rains (which can cause flash flooding), strong winds, hail, lightning, and tornadoes.



WHAT TYPE OF CLEAN-UP OR RECOVERY SHOULD BE EXPECTED AFTER YOUR SEVERE WEATHER EVENT?



After a severe thunderstorm hits your home, you could be looking at a few hundred dollars worth of simple repairs — broken windows, landscape upkeep and debris removal, for example — or you could be looking at thousands of dollars in repairs due to hail damage and flooding. Survey the extent of the damage and determine whether it will cause additional long-term issues; immediately fix anything that will. Here are some common post-storm damages and how to address them:

Websites

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eo.ucar.edu/kids/dangerwx/tstorm4.htm.

LaCrosse Technologies. "Understanding
How Thunderstorms and Snow Storms
Develop." K3JE's Weather Station, 2018,
www.k3jae.com/wxstormdevelopment.php.

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