2017 Top 5 Weather Events

As 2017 comes to a close, the staff of the National Weather Service (NWS) Office in Jackson wanted to share what we consider to be the Top 5 Weather Events of the year. The Top 5 Weather Events of the year, as voted on by the NWS Staff are as follows:

1. March 1st: Line of thunderstorms produces significant wind damage across eastern Kentucky (Click for More)



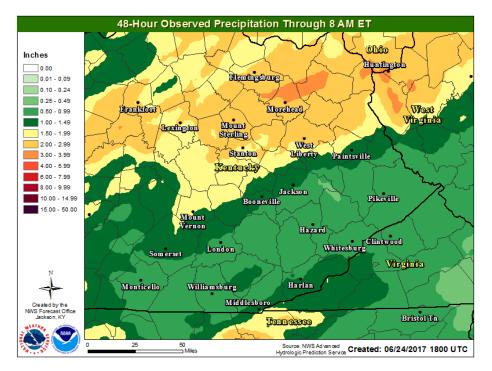
Wind damage in the Winston Community of Estill County.
Courtesy of WKYT

A powerful storm system moved across the Ohio Valley during the evening of Tuesday, February 28, 2017 through the morning hours of Wednesday March 1, 2017. Numerous tornado, damaging wind, and large hail reports occurred from the lower Great Lakes through the Tennessee Valley, including copious occurrences of damaging wind gusts across eastern Kentucky as a squall line of thunderstorms pushed through from northwest to southeast Wednesday morning.

Numerous reports of storm-related damage were received related to trees down across roads. Several commercial, residential, and manufactured structures sustained damage, including several sustaining significant roof damage or having their roof blown off. The potent winds overturned a number of vehicles and manufactured structures, while tens of thousands of power outages occurred due to downed utility poles. Additionally, minor roof damage was sustained at the National Weather Service office in Jackson as well as losing commercial power for several hours.

The strongest estimated winds occurred near Winston in Estill County, where a downburst led to an approximate 100 mph gust. Vehicles and buildings sustained severe damage. Several trees were uproots, a man was injured by flying glass as he attempted to shut the front door of his home, a vehicle was rolled over by the wind, and roof damage also occurred to several structures with a garage being completely destroyed.

2. June 23rd: Remnants of Tropical Storm Cindy bring Flooding Rains and damaging winds to eastern Kentucky (Click for More)



Storm total rainfall amounts as the remnants of Tropical Storm Cindy tracked across eastern Kentucky.

Tropical Storm Cindy, the third named storm of the 2017 Atlantic hurricane season, made landfall in Louisiana on June 22nd. Cindy quickly weakened to a Tropical Depression as it curved northeastward through Arkansas, and then transitioned to a Post-Tropical Cyclone as it traveled eastward across Kentucky. Despite the transition, the system left a path of flooding, wind damage and even a few tornadoes across the Bluegrass State during the afternoon and evening hours of June 23rd.

As Cindy's circulation tracked eastward across central Kentucky, a band of intense rainfall developed to the north, stretching from Elizabethtown east-northeastward through Lexington and into northeast Kentucky. This intense band of rain, with rainfall rates of over 4" per hour at times, aligned for a time west to east along interstate 64.

Flash flooding developed quickly under this band of heavy rain, with road closures reported through much of Montgomery, Bath, Fleming and Rowan Counties during the late evening hours. Despite the fact that the system moved quickly to the east, limiting the duration of heavy rainfall to 3 to 6 hours, rainfall amounts of 2 to 3" were common in these areas.

Farther to the south, strong winds occurred along Cindy's path from Larue County in central Kentucky eastward to near Pikeville. <u>Survey teams from National Weather Service Louisville confirmed two tornado touchdowns along with the wind damage that occurred between Hodgenville and Lebanon</u>. Farther to the east, the Mountain Parkway was blocked by fallen trees near Helechewa at one point, and a tree fell on a car on Whitestone Road in Wolfe County. Additional roads were blocked for a period of

time during the evening by fallen trees in Breathitt, Morgan, Magoffin and Floyd Counties. Shortly before midnight, Kentucky Power reported over 7,500 customers were without power due to the storm in their service area.

Cindy's rains followed heavy rains which fell in a more scattered nature on June 18th. Rowan and Fleming Counties were targeted by heavy rains during both events. The Morehead Regional Airport recorded 8.42" of rain during the week of June 18th through the 24th. According to the NOAA Atlas 14 Point Precipitation Frequency Estimates, the average return interval for that amount of rain in that area is between 50 and 100 years. In other words, based on climatology, there's only a 1 to 2% chance of getting that much rain in a week in any given year.

3. April 23rd: Flooding Across eastern Kentucky (Click for More)



Water over Tackett Creek Road south of Williamsburg. Courtesy WKYT

An area of low pressure moving across the Tennessee Valley brought an area of persistent light to moderate rain into southeastern Kentucky, beginning Sunday morning April 23rd and lasting into the overnight hours. This round of rain fell on top of what had fallen the previous several days, thus leading to numerous instances of flooding.

Rivers and streams began to rise through the day as widespread four day rainfall amounts of 4-5 inches fell near the Virginia and Tennessee state lines, and with three day amounts of 3-4 inches common. Several roads were closed due to high water, while multiple points along the Cumberland River experienced minor flooding for the next couple of days. A man was rescued 30 yards downstream along the Cumberland River near Williamsburg, where moderate flooding occurred, as he was pulled into the high waters. Minor flooding was also reported on the Kentucky River at Ravenna and Hazard, while several points along the Kentucky and Big Sandy Rivers breached action stage.

4. May 27th, Large Hail, Damaging Winds, and Flash Flooding from south Central Kentucky to eastern Kentucky (Click for More)



Numerous strong to severe thunderstorms caused wind damage, flash flooding, and large hail across south central Kentucky through eastern Kentucky during the afternoon and evening hours of Saturday, May 27, 2017. Several occurrences of quarter size hail occurred, the largest being the size of golf balls, near Stanton in Powell County. The worst flooding occurred in Pulaski County, where several feet of water flowed over a road near Shopville for a short period of time. Additionally, lightning struck a tree near Clay City, causing a tree to fall on a home.

5. July 23rd: Significant Flood and Wind Damage from Flemingsburg to Morehead



Flash Flooding in downtown Flemingsburg. Courtesy of Brent Wells

A prolonged line of thunderstorms developed on the evening of July 22nd near the Ohio River, slowly propagating southward late in the evening and after midnight into the 23rd. These made it south into Fleming and Rowan Counties, leading to numerous instances of wind damage and flash flooding.

Several structures were damaged due to high winds in Flemingsburg, including a house being completely destroyed. Over 1,100 power outages were reported throughout the county. Numerous homes, roads, and drainage systems suffered water damage from flash flooding, while an automobile dealership sustained damage to nearly 200 vehicles. An observer reported a rainfall total of 6.66 inches. A state of emergency was verbally declared for the county.

Flooding damage was also abundant in Rowan County, particularly in and around Morehead. More than 30 water rescues were performed as motorists became stranded by flood waters blocking roadways. More than 10 homes experienced significant water damage, while major road damage was also noted.

Honorable Mentions

2016-2017: The Winter that wasn't:



The Winter That Wasn't



• Winter (December-February) of 2016-2017 was the second warmest on record for Kentucky (41.4°F statewide average) going back to 1895-1896. The warmest winter was 1931-1932 (44.2°F statewide average).

Jackson Warmest Winters (records to 1981-1982)	Jackson Coldest Winters (records to 1981-1982)
43.0°F (2016-2017)	32.0°F (2009-2010)
41.7°F (2011-2012)	33.2°F (2002-2003)
41.4°F (1998-1999)	33.3°F (2010-2011)

London Warmest Winters (records to 1954-1955)	London Coldest Winters (records to 1954-1955)
42.5°F (2016-2017)	28.5°F (1977-1978)
41.6°F (1991-1992)	29.4°F (1976-1977)
41.3°F (1998-1999)	29.9°F (1962-1962)

· Least snowiest season on record (snow season from October to May) for Jackson, KY.

Jackson Least Snowiest (back to 1981-1982)	Jackson Snowiest (back to 1981-1982)
4.8 inches (2016-2017)	62.7 inches (1995-1996)
6.4 inches (1991-1992)	50.5 inches (2009-2010)
9.0 inches (1990-1991)	48.3 inches (1993-1994)