



National Weather Service
Lincoln, Illinois

Central Illinois Lincoln Logs



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Winter 2011-2012

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Winter Crash Statistics

By: Chris Miller, Warning Coordination Meteorologist

Every winter, snow and ice on area roads cause numerous traffic accidents in the state of Illinois. What you may not be aware of is that it does not take a major storm to cause an accident. In much of central and eastern Illinois a vast majority of the vehicle accidents that occur are associated with either a thin layer of ice – or with less than 2 inches of snow.



Traffic tries to navigate down Dirksen Parkway in Springfield during the blizzard of Feb. 12-13, 2007.

Photo by Joe Armstrong.

You may also be surprised to know just how many accidents occur during the winter season due to icy or snow covered roads. According to the Illinois Department of Transportation (IDOT), winter weather conditions have resulted in an average of nearly 29,000 accidents per season in the state of Illinois. These accidents have produced an average of 4,300 injuries and 50 fatalities each winter season. The worst year, recently, was in 2008 when more than 60,000 accidents were reported – resulting in 7,583 injuries and 82 fatalities.

Many of the reported accidents were a result of driving too fast for road conditions. Even if you have a four-wheel drive vehicle, snow and ice on the road will increase your braking distance. The key to winter driving is pay attention to the road conditions, and adjust your speed accordingly. Travel with a few basic items in your vehicle, so if you do get into an accident or become stalled on the side of the road, you will have a few things to be prepared for the elements. Items to have in your vehicle, even for short trips, include:

- Cell phone and charger
- Extra blankets or a sleeping bag
- Flashlight & extra batteries
- Non-perishable food
- A small car shovel
- Booster cables
- Windshield scraper & brush
- Road maps or GPS unit
- Two large, empty cans with covers and tissues
- Battery operated weather alert radio

Slow down when the conditions warrant and avoid becoming a statistic. Stay safe the rest of this winter!

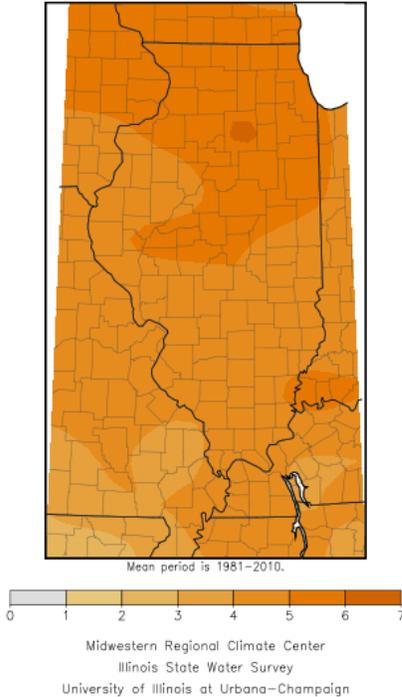
Road condition information from the Illinois Department of Transportation:

1-800-452-4368

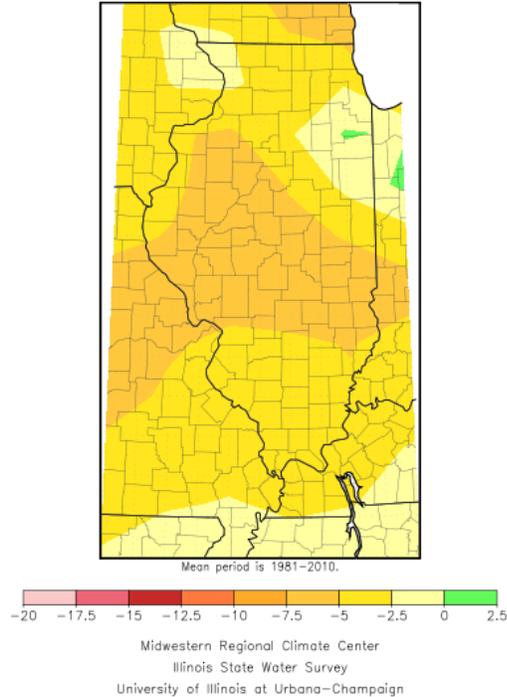
<http://wrc.gettingaroundillinois.com/pages/wrc.htm>

Winter Weather Largely Missing So Far

Average Temperature (°F): Departure from Mean
December 1, 2011 to January 25, 2012



Total Snowfall (inches): Departure from Mean
December 1, 2011 to January 25, 2012



Winter has not made much of an appearance across central and southeast Illinois thus far. While there have been a few periods of temperatures well below normal, they have only lasted a couple days on average. Temperatures for December and January have averaged 4 to 6 degrees above normal (top left image) Most of the area has not fallen below zero.

Snowfall has also been lacking. In the image at the top right, most of central and southeast Illinois has seen snowfall at least 5 inches below normal for the December/January period. Several locations had unusually long streaks in between occurrences of 1 inch snowfall. The following cities all finally received their first 1" snowfall on January 12:

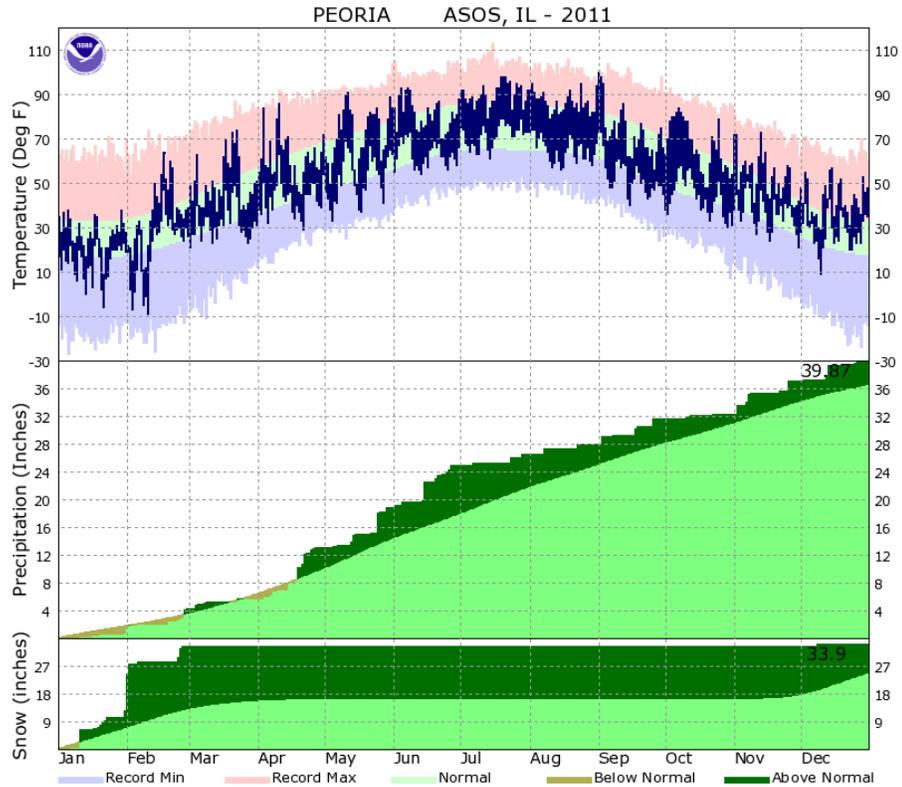
Location	Days between 1" snowfalls	Historical Rank	Record Streak (ending date)	Latest 1" to occur in a winter:
Galesburg	319 (Feb. 26 to Jan. 12)	5th place	345 days (3/14/1966)	March 5, 1966
Normal	320 (Feb. 25 to Jan. 12)	5th place	350 days (12/29/1927)	January 31, 1980
Peoria	320 (Feb. 25 to Jan. 12)	7th place	330 days (12/23/1918)	January 30, 1980
Lincoln	320 (Feb. 25 to Jan. 12)	8th place	372 days (2/21/1950)	February 22, 1950
Springfield	320 (Feb. 25 to Jan. 12)	15th place	374 days (1/14/1924)	March 20, 1983

Climate Statistics for 2011

(continued on next page)

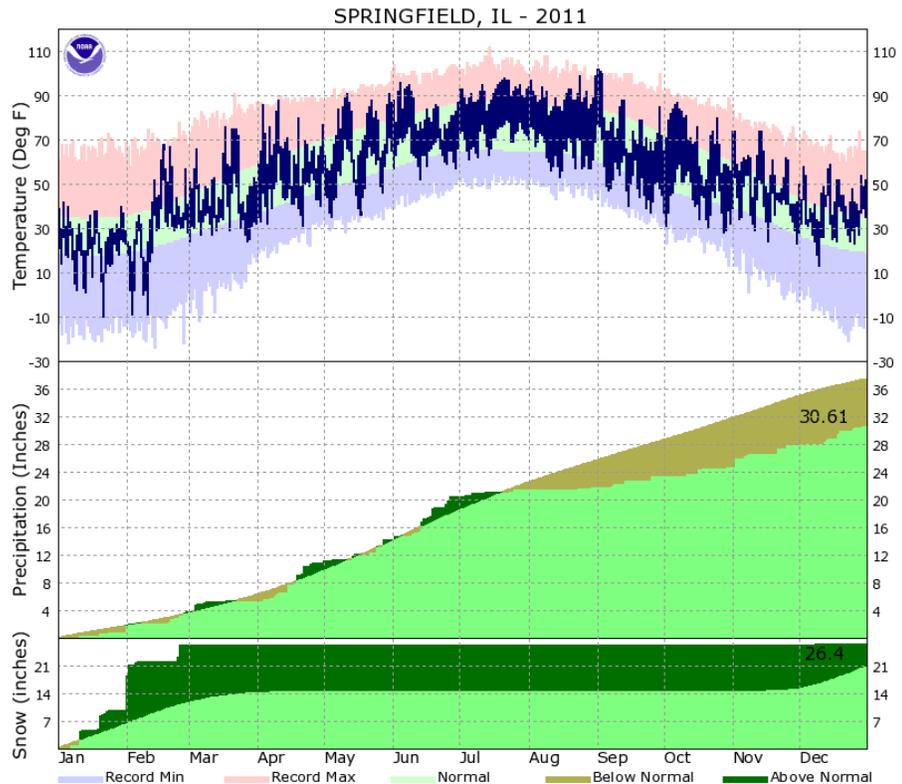
Peoria:

- Average temperature: 52.6°F (0.7°F above normal)
- Highest temperature: 100°F on Sep. 1
- 34 days with highs of 90°F or above (15.3 days above normal)
- Lowest temperature: -9°F on Feb. 10
- 6 days with lows of 0°F or colder (1.2 days below normal)
- Total precipitation: 39.87" (3.38" above normal)
- Most in 24 hours: 2.87" on May 24-25
- Total snowfall: 33.9" (9.3" above normal)
- Most in 24 hours: 14.8" on Feb. 1-2
- Highest wind speed: 62 mph on May 25



Springfield:

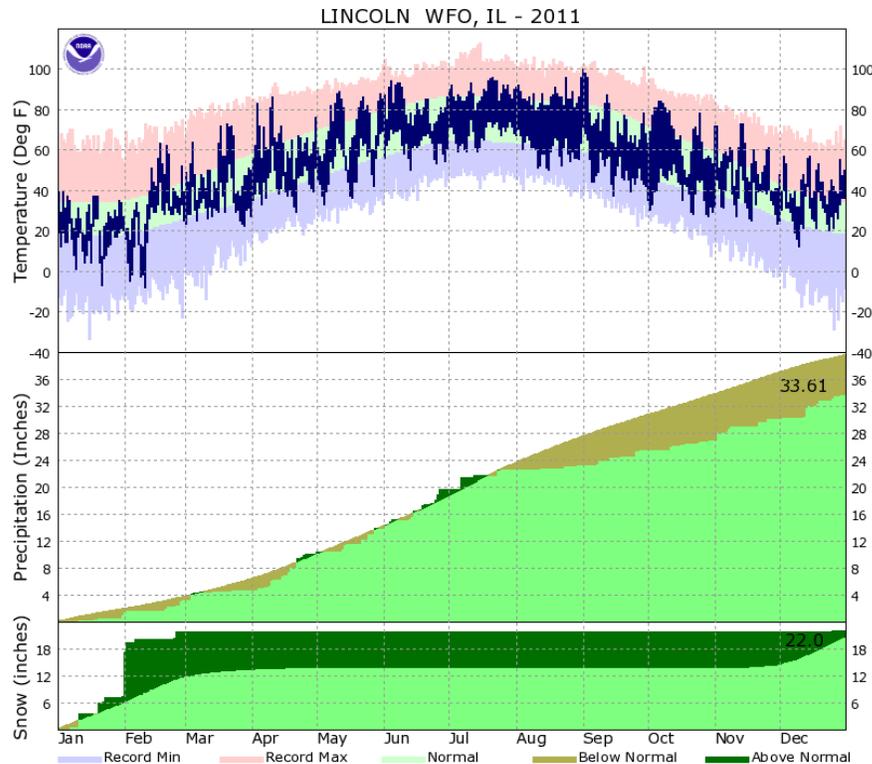
- Average temperature: 54.6°F (1.6°F above normal)
- Highest temperature: 102°F on Sep. 1
- 45 days with highs of 90°F or above (22.4 days above normal)
- Lowest temperature: -10°F on Jan. 21
- 4 days with lows of 0°F or colder (1.8 days below normal)
- Total precipitation: 30.62" (6.81" below normal)
- Most in 24 hours: 1.35" on June 13-14
- Total snowfall: 26.4" (5.5" above normal)
- Most in 24 hours: 11.4" on Feb. 1-2
- Highest wind speed: 51 mph on Feb. 27



Climate Statistics for 2011 *(continued)*

Lincoln:

- Average temperature: 52.3°F (0.2°F above normal)
- Highest temperature: 100°F on Sep. 1
- 27 days with highs of 90°F or above (6.7 days above normal)
- Lowest temperature: -8°F on Feb. 10
- 6 days with lows of 0°F or colder (0.3 days above normal)
- Total precipitation: 33.61" (5.99" below normal)
- Most in 24 hours: 1.74" on July 7
- Total snowfall: 22.0" (1.5" above normal)
- Most in 24 hours: 12.0" on Feb. 1-2



Area Weather Highlights for 2011

- The highest temperature of 104°F occurred at both Fisher and Hutsonville on July 23.
- The lowest temperature of -17°F was reported at Knoxville on February 10.
- Jacksonville reported 4.80" of rain on June 18, the most to occur in 24 hours at an official station.
- However, unofficial rainfall amounts in the area that day ranged from 6-10".
- Hutsonville and Jacksonville each reported 13.74" of rain, the most precipitation to occur in one month.
- St. David reported 23.9" of snow in February, the highest total for 1 month.
- On February 1-2, St. David and Winchester each reported 18.0" of snow, the most to occur in 24 hours at an official station.
- The Groundhog Blizzard of February 1-2 resulted in \$10 million damage, and another \$4.4 million in snow removal costs. Most areas along and west of I-55 received at least a foot of snow and winds gusting up to 65 mph, while ice was up to 3/4 inch thick in some areas along and south of I-70.
- A total of 21 tornadoes were reported across the area. The strongest was an EF-2 tornado which tracked for 5.5 miles south and east of Robinson on May 25.
- Springfield and Urbana both reached 100 degrees for the first time since the summer of 1995.
- Drought conditions quickly developed in July due to the heat, and lingered into the first half of fall.

All-Time 24-hour Snowfall Records Established February 1-2, 2011:

- Winchester — 18"
- Princeville — 17"
- Havana — 16"
- Galesburg — 15"
- Bradford — 15"
- Toulon — 14.8"
- Mackinaw — 13.6"
- Beardstown — 13.5"
- Jacksonville — 12" (tie)
- Normal — 12" (tie)

Severe Weather Statistics for 2011

By: Chris Miller, Warning Coordination Meteorologist

Last year was a record year for disasters in the United States. A total of 14 weather disasters produced more than a billion dollars in damage – with total damage estimates greater than \$52 Billion and nearly 1,000 fatalities in 2011. The state of Illinois was included in six of these billion dollar disasters:

- The Groundhog Day Blizzard (February 1-2)
- April 15 Tornado Outbreak
- May 25 Tornado / Severe Storm Outbreak
- Ohio and Mississippi River Flooding (Spring through early Summer)
- June 17-22 Flash Flooding and Severe Weather
- July 11-12 Severe Weather

With respect to tornadoes, nearly 1,900 were reported in the United States – which is about 600 more than normal. In Illinois, 73 tornadoes were observed, the majority of which were in central and southern Illinois. Normally, we experience about 44 tornadoes in the state each year. There were 10 tornadoes in February, 30 in April, 23 in May, 8 in June and 2 in July. Tornadoes resulted in 8 injuries in Illinois. The biggest tornado outbreak occurred in central and southern Illinois on April 19th, when 21 tornadoes were reported. This was the 5th largest outbreak in Illinois since 1950. The biggest outbreak on record was also on April 19th, in 1996, when 41 tornadoes occurred in the state. Flooding also took its toll on lives and property damage across the country – and in Illinois – in 2011. A total of 104 people died as a result of floods in the United States, four of them in Illinois. More than half of the flood fatalities nationwide occurred in vehicles. Flooding along the Wabash, Ohio, and Mississippi Rivers – as well as a major flash flood in Jacksonville, IL and two in Chicago – produced hundreds of millions of dollars in flood damage in Illinois.

There was some good news with respect to storms in 2011. The downward trend of lightning fatalities, nationwide, continued. There were still 26 people in the United States who died from a lightning strike, but that was the lowest number since records for this began in 1940. Sixty years ago, an average of about 250 people died each year due to lightning strikes. Thirty years ago, this average dropped to about 80, and now the average annual fatalities are around 40. Awareness and education about the dangers of lightning are attributed to this decline.

Spotter Training Now Being Scheduled

Storm spotter training for the 2012 season is now being scheduled! Training is typically done between late February and early April, in advance of the peak of the severe weather season. Classes are about 2 hours in length, and are free of charge.

Locations and contact information are being posted on our homepage at:

<http://www.weather.gov/lincoln/?n=spotter>

Check back often for the latest listings!



This funnel cloud was photographed near Morton on July 19, 2011. Photo by Zach Smith.

Reported tornadoes in central and southeast Illinois during 2011, broken down by county:

3 — Christian and Vermilion.

2 — Macon, Menard, McLean, Shelby.

1 — Champaign, Clay, Crawford, Edgar, Mason, Richland, Schuyler.

Skywarn Recognition Day Held December 3

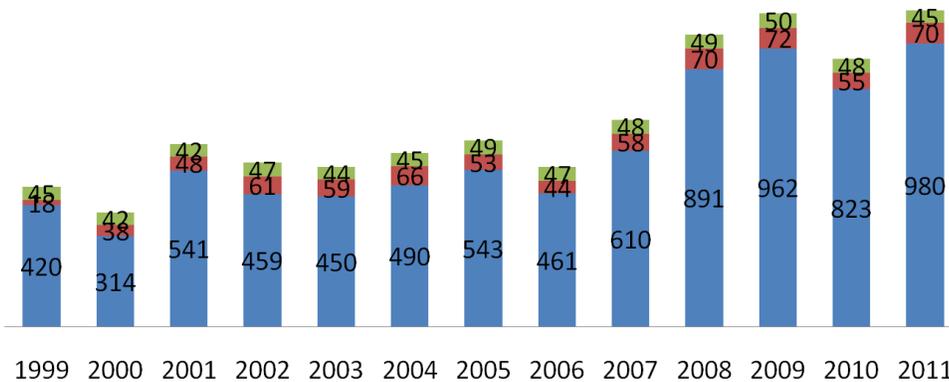


The National Weather Service in Lincoln participated in the annual Skywarn Recognition Day, which ran on December 3 from 00Z to 24Z (6 pm CST December 2 to 6 pm CST December 3). Skywarn Recognition Day, begun in 1999, is a national event conducted by the NWS and the American Radio Relay League, to celebrate the contributions that volunteer radio operators make to NWS operations.

This year, the Lincoln NWS made a total of 980 QSO's (contacts) in 45 states, and was able to contact 70 other NWS offices. The nationwide leader was the Melbourne, FL NWS office, which made 1,604 QSO's across all 50 states, contacting 81 other NWS offices.

ILX QSO Contacts during Skywarn Recognition Day

■ Total Contacts ■ NWS Offices Contacted ■ States Contacted



Autumn Climate Statistics:

Peoria:

- Average temperature: 54.3°F (0.4°F above normal)
- Total precipitation: 8.99" (0.13" below normal)
- Trace of snow (1.1" below normal)

Springfield:

- Average temperature: 56.2°F (1.2°F above normal)
- Total precipitation: 6.18" (3.08" below normal)
- No snow (0.6" below normal)

Lincoln:

- Average temperature: 53.8°F (0.1°F below normal)
- Total precipitation: 6.97" (2.57" below normal)
- Trace of snow (0.6" below normal)

Normals based on the 1981-2010 period

COOP Corner

By: Billy Ousley, Data Acquisition Program Manager

Below are some instructions that may be helpful to some of our Cooperative Observation program observers that take and record temperature readings. These are the instructions observers should have available to help set/reset or troubleshoot the MMTS Nimbus Temperature display.

When we come to your home and set the unit's time, it is normally set so "0000" occurs at the observer's observation time. This gives us (the NWS office) and our observers more flexibility, with complete and more accurate data.

Advantages:

- Observer on vacation — When he gets back he can use the instructions provided and get the missing temperatures and put on his B-91 or send data through WxCoder using the monthly spread sheet. If he is not comfortable getting the info, he can call me and I will tell him what buttons to push and he can read the data to me on the phone and I can enter the data into WxCoder system.
- Reservoirs, Water Plants or any place where people are gone for the weekend — On Monday they can retrieve the weekend data and send it on WxCoder or they can call it into the Weather Office and we can send it for them.
- On weekends when the observer sleeps in — The data is automatically saved at his observation time. When he sends the data it's the correct data. I can give many more examples.
- The above helps a lot in quality control of data. At the end of the month if data is missing I can call the observer and in a short time over the phone I have the data.
- A good 9 volt battery will hold record data for 5 days during lost power. If the battery is low, displayed as a (L) on the Nimbus display, time is a lot shorter; if too weak you can lose all data during a power outage. Avoid low battery.
- Questionable data can also be check out.
- Overall better and complete data is obtained.

One of the drawbacks is that the memory unit is not user friendly. (The instructions below help make it more user friendly.)

Instructions to set the Nimbus Memory Internal Clock:

1. In the Nimbus operations manual, read pages 1-9 and 16, 17 and 19, to better understand the different operating functions. The general instructions to set the internal clock are on page 4.
2. Press the Recall button and hold it, as you flip the memory switch from Off to On.
3. Hold the recall button for about 3 seconds, until you see E3E.3 in the display window.

You have entered the time mode and now can reset the unite internal clock.

5. Press the Units display, black...3 buttons. This will allow you to reset the hours and minutes. The unit temperature memory, remembers the daily High and Low temperature, when 0000 (local standard time) occurs, each day out to 36 days. To make this system work for your observation time, we have to manipulate the time so 0000 on the display will occur at the observers normal observation time.

6. The best way to find the hours and minutes is to look at your watch and count the number of hours from your normal observation time to the present time, plus minutes.

Example: Your regular observation time is 7 AM, your present watch time is 2:35 PM.

a. 7AM to 2:35 PM would give you 7 hours and 35 minutes, enter 7:35 AM.

b. 8 AM to 10:22 PM in the evening, enter 14:22. (Use Military time format)

7. When finished flip the memory switch from On to Off.

2011 a Year of Climate Extremes in the U.S.

According to NOAA scientists, 2011 was a record-breaking year for climate extremes, as much of the United States faced historic levels of heat, precipitation, flooding and severe weather, while La Niña events at both ends of the year impacted weather patterns at home and around the world.

NOAA's annual analysis of U.S. and global conditions, conducted by scientists at the National Climatic Data Center, reports that the average temperature for the contiguous U.S. was 53.8°F, 1.0°F above the 20th century average, making it the 23rd warmest year on record. Precipitation across the nation averaged near normal, masking record-breaking extremes in both drought and precipitation.

On a global scale, La Niña events helped keep the average global temperature below recent trends. As a result, 2011 tied with 1997 for the 11th warmest year on record. It was the second coolest year of the 21st century to date, and tied with the second warmest year of the 20th century.

Key highlights of the report include:

- NOAA has identified 14 events in 2011 that caused an economic impact of \$1 billion or greater (not including the pre-Halloween snowstorm in the Northeast, which is still being analyzed).
- **Tropical Storm Lee**, which made landfall on the Gulf Coast on September 2, caused wind and flood damage across the Southeast, but considerably more damage to housing, business and infrastructure from record flooding across the Northeast states, especially Pennsylvania and New York. The storm occurred in an area that had experienced high rainfall from Hurricane Irene barely a week earlier.
- **A Rockies and Midwest severe weather outbreak**, which occurred July 10-14, included tornadoes, hail and high winds. Much of the damage was from wind, hail, and flooding impacts to homes, business, and agriculture.
- Warmer-than-normal temperatures were anchored across the South, Mid-Atlantic and the Northeast. Delaware had its warmest year on record, while Texas had its second warmest year on record. The U.S. has observed a long-term temperature increase of about 0.12°F per decade since 1895.
- Summer (June-August) 2011 was the second warmest on record for the Lower 48, with an average temperature of 74.5°F, just 0.1°F below the record-warm summer of 1936. The epicenter of the heat was the Southern Plains, where Louisiana, New Mexico, Oklahoma and Texas all had their warmest summer on record. The 3-month average temperatures for both Oklahoma (86.9°F) and Texas (86.7°F) surpassed the previous record for warmest summer in any state.
- With the exception of Vermont, each state in the contiguous U.S. had at least one location that exceeded 100°F.
- Despite a "near normal" national precipitation average, regional precipitation outcomes varied wildly. Texas, ravaged by exceptional drought for most of 2011, had its driest year on record. In contrast, seven states in the Ohio Valley and Northeast — Connecticut, Indiana, Kentucky, New Jersey, New York, Ohio, and Pennsylvania — had their wettest year on record.
- Precipitation extremes and impacts were most prevalent during spring (March - May) 2011. Across the northern U.S., ten states were record wet, and an additional 11 states had spring precipitation totals ranking among their top ten wettest. These precipitation extremes, combined with meltwater from a near-record snow pack, contributed to historic flooding along several major rivers across the central United States.
- Meanwhile, drought rapidly intensified in the southern Plains, where Texas had only 2.66 inches of precipitation, its driest spring on record. This led to record breaking drought and wildfires, which devastated the southern Plains. Following 2010, during which drought across the country was nearly erased, the 12 percent of the continental U.S. in the most severe category of drought (D4) during July 2011 was the highest in the U.S. Drought Monitor era (1999-2011).
- The spring brought a record breaking tornado season to the United States. Over 1,150 tornadoes were confirmed during the March-May period. The 551 tornado-related fatalities during the year were the most in the 62-year period of record. The deadliest tornado outbreak on record (April 25-28th) and the deadliest single tornado (Joplin, Missouri) contributed to the high fatality count.

Central Illinois Lincoln Logs

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www.weather.gov/lincoln

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