

August 2009 Significant Weather Events

*The first week of August saw intense heat in the southwest U.S. spread rapidly north and east enveloping the Plains and Midwest in time for the upcoming weekend. Highs in the 90s gripped areas well to the north through the Great Lakes and heat index readings approached 100 degrees F in cities like Chicago, St. Louis, and Kansas City.

*A strong disturbance on August 9th produced a widespread severe weather event from Nebraska to Pennsylvania with over 250 severe reports. Tornadoes were reported in New York and Pennsylvania.

*From Aug 10-12, intense heat and humidity was widespread in the eastern third of the U.S. and Canada with temperatures into the 90s as far north as New York City. Heat index readings exceeded 100 degrees F in the Mid-Atlantic region and points south.

*A record daily high temperature record was set in Tallahassee, FL (97F) and Wilmington, NC (97F).

*In the West, after intense (and in some cases, record) heat enveloped the area in recent weeks, the week of 9-15 August was a considerably cooler week as invasions of cooler Canadian air surged southward into all of the western U.S.

*Record daily low temperatures were set in Rawlins, WY (39F), Yakima, WA (41F), and Cedar City, UT (48F). San Diego had its coolest afternoon daily high on Wednesday of 69 degrees F.

*Tropical Storm Ana, the first named storm of the Atlantic season, formed on August 15th, making it the latest start to the season since 1992. Hurricane Bill became a Category 3 storm, but veered away from the U.S., striking Bermuda and then the Canadian Maritimes with hurricane forecast winds and heavy rains. With Hurricane Bill just off the East Coast of New England on the 22nd, high wind and strong surf impacted the beaches and inland coastal areas. Wave reports ranged from 5 to 13 feet.

*On 16 August, a tropical wave that moved into the eastern Gulf of Mexico became Tropical Storm Claudette producing heavy rains in much of Florida. Several inches of rain produced localized flooding.

*A strong severe weather episode occurred on the 19th with over 250 reports, many with hail up to an inch in diameter and wind gusts of up to 75 mph, across the nation's heartland. 30 tornadoes were reported from Minnesota to western Ohio. An EF-0 tornado touched down in south Minneapolis and made it close to the downtown convention center before dissipating.

*The East coast sizzled ahead again on 19-21 August ahead of a strong cold front with temperatures reaching in the low to mid 90s. Along with very oppressive humidity levels, heat index readings exceeded 100 degrees F. This was the warmest late August week in over 11 years in the Mid-Atlantic and New England regions.

*Tropical Storm Danny became the 4th named Atlantic storm of the season (and within August) on the 26th east of the Bahamas. After initial concerns about a potential landfall in the Carolinas, the storm steered away from the Atlantic coast.

*The heat returned with a vengeance the last week of the month in the western half of North America. Numerous daily high temperature records were broken from Texas to the West Coast and included: Wichita Falls, TX (107F), Austin, TX (103F), McAllen, TX (103F), Pullman, AA (100F), Seligman, AZ (98F), Cedar city, UT (97F), San Francisco (96F), Long Beach, CA (96F), Eureka, NV (94F), Bozeman, MT (92F), San Diego (91F), and Eureka, CA (78F). Phoenix (113F) and Tucson (106F) tied their record.

*The start of the final weekend (29-30 August) was a soggy one along portions of the East Coast due to the combination of an approaching cold front and Tropical Storm Danny, which stayed off the East Coast. Coastal locations saw strong onshore gales, high waves, and beach erosion with heavy rain squalls.

*Eastern New England and the Canadian Maritimes bore the brunt of the nasty weather with rain totals of up to 6 inches before Danny moved off.

*A “Taste of Fall” overspread the Plains, Midwest, and into the Mid-South region late month. Despite abundant sunshine, temperatures were well below normal with morning temperatures in the 40s and 50s. Highs both Saturday (29th) and Sunday (30th) in the Midwest struggled to get out of the 60s, setting some record low maximum temperature records. Sub-freezing temperatures made it as far south as northern Minnesota and Wisconsin.

August 2009 Stats

Against a cooler than typical August last year, this August ended on the warmer side of normal. However, it was actually cooler to most years of the past decade. A similar trend held in precipitation as the month ended on the wet side against the long-term average, but was actually one of the driest in recent years.

North America:

Mean Temperature: (72.37F) **Warmer than average and to last year, although the 3rd coolest August in the past 10 years.**

U.S.

Mean Temperature: (74.89F) **Warmer than average and to last year, although the 3rd coolest August in the past 10 years.**

North America:

Precipitation: **Wetter than average month, although the 3rd driest in 7 years.**

U.S.:

Precipitation: **Near average month, although the 2nd driest in 7 years.**

Regional temperature differences were notable. It was brutally hot across much of the southern Plains and Texas, where daily high temperatures often exceeded 100F. The other region with strong warm anomalies was along the East Coast from the Carolinas to Maine.

San Antonio: **(88.54F) Warmest August ever recorded, breaking record set in 2006. This follows the warmest July ever recorded.**

Phoenix: (95.17F) Warmest since 2007 and 3rd warmest in 15 years (1994).

El Paso, TX: (84.2F) 4th warmest August in 50 years. Warmest since 2002 and 3rd warmest in 15 years (1994).

Houston: (86.42F) Warmest since 1999 and 3rd warmest in 16 years (1993).

Raleigh-Durham, NC: (80.7F) 2nd warmest August ever **lagging only August 2007.**

Hartford, CT: (75.3F) Warmest since 2005 and 3rd warmest in 8 years (2001).

Other “Top Ten” warm cities for August include: San Francisco, Reno NV, Philadelphia, New York City, Boston, and Portland ME.

It was the 11th warmest August in the Northeast region in 50 years, the 4th warmest in the past 7 years.

The coolest anomalies across North America during the month were in the interior sections focused in the Northern Plains and Midwest.

Pierre, SD: (69.68F) Coolest since 2004 and 3rd coolest in 17 years (1992).

Los Angeles, CA: (68.67F) 8th Coolest in 50 years, coolest in 7 years (2002)

Other notable cities to experience “Top Ten” coolest readings include: Kansas City MO, Wichita KS, and Peoria IL.

The West North Central region had its 10th coolest August ever, the 4th coolest since 1985 (24 years).

Regional (Precipitation):

Heavy precipitation was scattered in pockets around the U.S., but primarily focused in the northern interior and in the eastern third of

the U.S. and Canada, which was amplified by tropical systems Bill and Danny.

Philadelphia: (10.29 inches) **Wettest August ever recorded, breaking the record set in 1971 (38 years).**

Pierre, SD: (3.78 inches) 3rd wettest August., **lagging only 1970 and 2005.**

Amarillo, TX: (6.89 inches) 3rd wettest August., **lagging only 1974 and 1986.**

Oklahoma City, OK: (5.74 inches) While drier against record rains last August, it was the 3rd wettest since 1996 (13 years)

Saskatchewan, SK: (3.64 inches) **Wettest August ever recorded, breaking the record set in 1988 (21 years).**

Charlottetown, PEI: (7.59 inches) 3rd wettest August in 50 years, **lagging only 1991 and 2008.**

Others having a “Top Ten” wet August include: Baltimore-Washington, Portland ME, Atlanta, Fort Smith AR, New Orleans, Dubuque IA, Omaha, Minneapolis, and St. John’s, Newfoundland.

The West North Central region had its 7th wettest August ever, wettest since 2006, and the 4th wettest since 1993 (16 years).

Drier than typical weather was focused in portions of the Southeast, Texas, and much of the west, particularly the Southwest.

Tampa: (3.52 inches) **lagging only August 1990 and 2001.**

Raleigh-Durham, NC: (1.51 inches) It was the driest since 1991 and 3rd driest in 12 years (1997).

Others having a “Top Ten” dry August include: **Brownsville and San Antonio, TX.**

The Southwest region had its 2nd driest August ever, lagging only August 1962 (47 years).