

NORTHEASTERN STORM / BUSTER SKYW



Fall, 2018 - VOL. 24, NO.1

Evan L. Heller, Editor/Publisher Steve DiRienzo, WCM/Contributor

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Northeastern StormBuster is a semiannual publication of the National Weather Service Forecast Office in Albany, New York, serving the weather spotter, emergency manager, cooperative observer, ham radio, scientific and academic communities, and weather enthusiasts, all of whom share a special interest or expertise in the fields of meteorology, hydrology and/or climatology. Non-Federal entities wishing to reproduce content contained herein must credit the National Weather Service Forecast Office at Albany and any applicable authorship as the source,

POUGHKEEPSIE & GLENS FALLS PERIOD OF RECORD EXPANDED

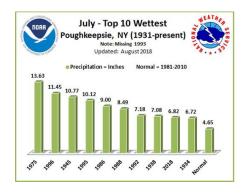
Ingrid Amberger Senior Meteorologist, NWS Albany, NY

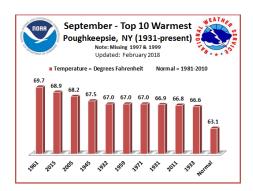
The National Weather Service (NWS) Forecast Office in Albany was able to expand the period of record for both Poughkeepsie and Glens Falls, New York. This was done using the ThreadEx Project, which is a joint effort between NOAA's National Centers for Environmental Information, the National Weather Service and the Northeast Regional Climate Center.

The ThreadEx Project was designed to address the fragmentation of station information over time due to station relocations for the express purpose of calculating daily extremes of temperature and precipitation. The methodology used is to take a currently active station as the starting point for a station thread. The station's current record is used as far back in time as possible, taking precedence over a closed station's record during any periods of overlap. A search is conducted to identify other weather stations in the area that could be used to extend the thread further back in time. In this process, preference is given to Weather Service/Bureau stations. The thread is extended back in time as far as possible using NOAA daily data available in digital form that has gone through a quality control process.

The Hudson Valley Regional Airport, formerly known as the Dutchess County Airport, was threaded with NWS Cooperative Observer Program (COOP) stations, and the period of record for Poughkeepsie was extended back to 1931. However, there are still some gaps: in the temperature data from 1993 to 2000, and; in the precipitation in 1993. These have been noted on the climate charts and tables as needed.

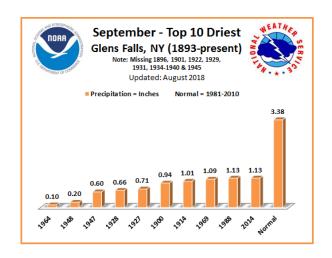
Station	Dates
Poughkeepsie COOP #306817	January 1, 1931 to October 31, 1948
Poughkeepsie - Dutchess County Airport	November 1, 1938 to November 12, 1993
Poughkeepsie COOP #306820	November 13, 1993 to July 30, 2000
Poughkeepsie - Hudson Valley Regional Airport	July 31, 2000 to Present



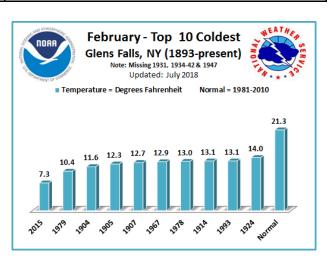


The Floyd Bennett Memorial Airport was threaded with a NWS COOP station, and the period of record for Glens Falls was extended back to 1893. However, there are still gaps in temperature and precipitation data prior to 1949. Most notably, data is missing for 1931 and from January 1934 through August 1942. Again, these have been noted on the climate charts and tables as needed.

Station	Dates
Glens Falls Fire Station COOP #303289	January 1, 1893 to April 30, 1944
Glens Falls - Floyd Bennett Memorial Airport	May 1, 1944 to Present



Annual Climate Report



You can access the climate data for Albany NY, Glens Falls NY, Poughkeepsie NY, Bennington VT and Pittsfield MA from our climate page: www.weather.gov/aly/climate. This is a snapshot of that page:

Local Climate Data Albany, NY Weather.gov > Albany, NY > Local Climate Data Weather Forecast Office **Current Hazards** Current Conditions Radar Forecasts Rivers and Lakes Climate and Past Weather **Local Programs** Pittsfield MA **Albany NY** Glens Falls NY **Bennington VT More Data** Poughkeepsie NY Reports - POU **Historical Data & Normals Daily Climate Report** Extremes --- Records --- Holidays Record Event Report Monthly Climatological Data: Current Month & Past Months Monthly Climate Report 1981-2010 Normals: Frost / Freeze Summary Seasonal Climate Report 1981-2010 Normals: Monthly / Seasonal / Annual

1981-2010 vs 1971-2000 Normals

NWS ALBANY TO HOST CoCoRaHS OBSERVER APPRECIATION DAY

Evan L. Heller Meteorologist, NWS Albany, NY

NWS Albany will be hosting a CoCoRaHS Observer Appreciation Day as a thank you to all those who've helped us build a comprehensive database of local climatology with their generous time and effort. All current CoCoRaHS observers and individuals with connections to current members who wish to join our local CoCoRaHS team were invited to attend. NWS Albany Meteorologists Jennifer Vogt and Christina Speciale, our regional Eastern New York and Western New England CoCoRaHS team, have put together this special event. The date is Saturday, October 13, 2013 from 1 to 3 p.m. here at the NWS Albany Forecast Office.

All current observers will be receiving appreciation certificates at the event. A portion of the event will be workshop, where best practices and data usage will be discussed. Other fun activities are planned as well. A tour of our office will be conducted after the meeting. For more information about the local program, please contact Stephen.DiRienzo@noaa.gov.

LAUNCHING WEATHER BALLOONS FROM NWS ALBANY

Evan L. Heller Meteorologist, NWS Albany, NY

I'm the upper air focal point here at the National Weather Service Forecast Office in Albany. One of our office's primary functions is to take upper air observations. Twice a day, we routinely launch weather balloons, along with a network of more than 90 other offices across the country. The balloons carry radiosondes high up into the atmosphere to measure temperature, pressure, relative humidity and wind, the data of which is ingested into national models to help NOAA and the National Weather Service make accurate forecasts. In addition to these, special observations are occasionally done when there are events that require special focus, such as a heightened risk for severe thunderstorms, tornadoes and hurricanes. Recently, for hurricane Florence we did four flights a day for several days until the threat was diminished. Many other east coast upper air offices did the same.

Would you like to see the process we go through in preparing and launching radiosonde balloons? Well, recently, we prepared a video to provide the public with a close look at, and a better understanding of, how we perform this very important function at our office. The short and informative YouTube video can be viewed here: https://www.youtube.com/watch?v=MKNYiEJielE

ALBANY SEASONAL CLIMATE SUMMARY

Evan L. Heller, Climatologist

Records or values of note highlighted in yellow.

SPRING 2018

STATS

	MAR	APR	MAY	SEASON
Average High Temperature/Departure from Normal	40.8°/-3.6°	50.6°/-7.7°	75.5°/+6.1°	55.6°/-1.8°
Average Low Temperature/Departure from Normal	27.3°/+1.6°	31.6°/-5.7°	53.0°/+5.9°	37.3°/+0.6°
Mean Temperature/ Departure From Normal	34.1°/-0.9°	41.1°/-6.7°	64.3°/+6.0°	46.5°/-0.5°
High Daily Mean Temperature/Date	43.5°/30th & 31st	57.5°/24th	74.5°/26th	
Low Daily Mean Temperature /Date	19.5°/18th	29.0°/8th	49.0°/12th	
Highest Temperature reading/Date	56°/31st	70°/24 th	90°/2 nd	
Lowest Temperature reading/Date	7°/18 th	19°/6 th & 8 th	41°/8th	
Lowest Maximum Temperature reading/Date	32°/16 th & 18 th	36°/15 th	50°/12 th	
Highest Minimum Temperature reading/Date	37°/30 th	49°/25 th	62°/29th	
Total Precipitation/Departure from Normal	3.06"/-0.15"	4.17"/+1.00"	1.64"/-1.97"	8.87"/-1.12"
Total Snowfall/Departure from Normal	36.0"/+25.8"	2.4"/+0.1"	0/-0.1	38.4"/+25.8"
Maximum Precipitation/Date	1.08"/2 nd	1.24"/16th	0.59"/19th	
Maximum Snowfall/Date	11.9"/2 nd	1.3/7 th	0	

Table 1

NORMALS, OBSERVED DAYS & DATES

	NURMALS, UBSER	ED DAIS & DAIES		
NORMALS & OBS. DAYS	MAR	APR	MAY	SEASON
NORMALS				
High	44.4°	58.3°	69.4°	57.4°
Low	25.7°	37.3°	47.1°	36.7°
Mean	35.0°	47.8°	58.3°	47.0°
Precipitation	3.21"	3.17"	3.61"	9.99"
Snow	10.2"	2.3"	0.1"	12.6"
OBSERVED TEMPERATURE DAYS				
High 90° or above	0	0	1	1/92
Low 70° or above	0	0	0	0/92
High 32° or below	2	0	0	2/92
Low 32° or below	27	17	0	44/92
Low 0° or below	0	0	0	0/92
OBS. PRECIPITATION DAYS				
Days T+	21	22	14	60/92/62%
Days 0.01"+	9	17	10	36/92/39%
Days 0.10"+	6	11	8	25/92/27%
Days 0.25"+	3	4	1	8/92/9%
Days 0.50"+	3	2	1	6/92/7%
Days 1.00"+	1	2	0	2/92/3%

Table 2a

NOTABLE TEMP, PRECIP & SNOW DATES	MAR	APR	MAY
,	MIX		14111
Last Snowfall	-	30 th (trace)	-
Last Freeze	-	23 rd (30°)	-
90+ Degree Date	-	-	90°/2 nd
1.00"+ Precipitation Date	2 nd (1.08")	16 th (1.24")	-
1.00"+ Precipitation Date	-	25 th (1.05")	-
Significant Snow Event	2 nd (11.9")	-	-
Significant Snow Event	7 th -9 th (12.1")	-	-
Significant Snow Event	12 th -14 th (12.0")	-	-
Wet Spell (All days w/measureable precipitation)	24th-30th (1.96")	-	-

Table 2b

RECORDS

ELEMENT	MAR	СН
Daily Maximum Precipitation Value/Date Previous Record/Year	1.08"/2 nd	0.93/2007
Daily Maximum Snowfall Value/Date Previous Record/Year	11.9"/2 nd	6.2"/1948
Top 10 Snowiest Marches Value/Rank Remarks	<mark>36.0"/#3</mark>	-
Top 100 Snowiest Months	36.0"/#10	-
Lowest Daily Average Wind Speed Value/Date Previous Record/Year	1.4 mph/26 th	2.8 mph/1993

Table 3a

ELEMENT	APF	RIL
Daily Minimum Temperature Value/Date Previous Record/Year	19°/8 th	19°/1982
Daily Maximum Snowfall Value/Date Previous Record/Year	T/30 th	T/2008
Lowest Daily Average Wind Speed Value/Date Previous Record/Year	1.6 mph/27 th	1.8 mph/2000
Top 10 Coolest Aprils Value/Rank Remarks	41.1°/#7	-
Top 10 Coolest Mean Maximum Aprils Value/Rank Remarks	50.6°/#5	-
Top 10 Coolest Mean Minimum Aprils Value/Rank Remarks	31.6°/#8	tie

Table 3b

ELEMENT	MAY	
Daily Maximum Temperature Value/Date Previous Record/Year	90°/2 nd	88°/2001
Daily High Mean Temperature/Date Previous Record/Year	72.0°/3 rd	71.5°/1913
Top 10 Warmest Mays Value/Rank Remarks	64.3°/#9	-
Top 10 Warmest Mean Minimum Mays Value/Rank Remarks	53.0°/#7	-
Lowest Daily Average Wind Speed Value/Date Previous Record/Year	3.8 mph/3 rd	4.1 mph/2015
Lowest Daily Average Wind Speed Value/Date Previous Record/Year	3.4 mph/8 th	3.4 mph/1996
Top 200 Calmest Months Value/Rank Remarks	7.0 mph/#173	21-way tie

Table 3c

ELEMENT	SPR	ING
none	_	-

Table 3d

MISCELLANEOUS MARCH

Average Wind Speed/Departure from Normal	10.0 mph/+0.4 mph
Peak Wind/Direction/Date	48 mph/W/17 th
Windiest Day Average Value/Date	16.4 mph/15 th & 16 th
Calmest Day Average Value/Date	2.8 mph/26 th
# Clear Days	3
# Partly Cloudy Days	12
# Cloudy Days	16
Dense Fog Dates (code 2)	2 nd , 7 th & 13 th
Thunder Dates (code 3)	None
Sleet Dates (code 4)	None
Hail Dates (code 5)	None
Freezing Rain Dates (code 6)	None

Table 4a

APRIL

	III KIL
Average Wind Speed/Departure from Normal	9.2 mph/+/-0 mph
Peak Wind/Direction/Date	51 mph/NW/5 th
Windiest Day Average Value/Date	17.1 mph/4 th
Calmest Day Average Value/Date	1.6 mph/27 th
# Clear Days	3
# Partly Cloudy Days	16
# Cloudy Days	11
Dense Fog Dates (code 2)	None
Thunder Dates (code 3)	None
Sleet Dates (code 4)	3 rd , 4 th & 15 th
Hail Dates (code 5)	None
Freezing Rain Dates (code 6)	15 th & 16 th

Table 4b

MAY

	PILL
Average Wind Speed/Departure from Normal	7.0 mph/-0.9 mph
Peak Wind/Direction/Date	46 mph/WNW/4th
Windiest Day Average Value/Date	$11.8\mathrm{mph}/10^{\mathrm{th}}$
Calmest Day Average Value/Date	3.1 mph/13 th
# Clear Days	4
# Partly Cloudy Days	16
# Cloudy Days	11
Dense Fog Dates (code 2)	7 th & 16 th
Thunder Dates (code 3)	4 th & 15 th
Sleet Dates (code 4)	9th
Hail Dates (code 5)	31^{st}
Freezing Rain Dates (code 6)	None

Table 4c

SUMMER 2018

STATS

	JUN	JUL	AUG	SEASON
Average High Temperature/Departure from Normal	78.9°/+1.0°	87.4°/+5.1°	83.7°/+3.3°	83.3°/+3.1°
Average Low Temperature/Departure from Normal	56.9°/+0.4°	65.7°/+4.3°	<mark>66.5°/+6.6°</mark>	63.0°/+3.7°
Mean Temperature/ Departure From Normal	67.9°/+0.7°	<mark>76.5°/+4.7</mark> °	75.1°/+5.0°	73.2°/+3.5°
High Daily Mean Temperature/Date	84.0°/18th	87.0°/2 nd	85.5°/28th	
Low Daily Mean Temperature /Date	56.0°/5 th	65.5°/7 th	66.0°/31st	
Highest Temperature reading/Date	97°/18 th	97°/1st & 2nd	96°/28 th & 29 th	
Lowest Temperature reading/Date	48°/4th, 5th, 6th & 26th	51°/7 th	57°/24 th	
Lowest Maximum Temperature reading/Date	64°/5 th	80°/7 th & 17 th	71°/11 th	
Highest Minimum Temperature reading/Date	71°/18 th	77°/2 nd	75°/28 th	
Total Precipitation/Departure from Normal	3.00"/-0.79"	4.72"/+0.60"	4.20"/+0.74"	11.92"/+0.55"
Total Snowfall/Departure from Normal	0.0"/-	0.0"/-	0.0"/-	0.0"/-
Maximum Precipitation/Date	0.58"/27th	1.13"/28th	0.80"/3rd	
Maximum Snowfall/Date	0.0"/-	0.0"/-	0.0"/-	

Table 1

NORMALS, OBSERVED DAYS & DATES

NORMALS & OBS. DAYS	JUN	JUL	AUG	SEASON
NORMALS				
High	77.9°	82.3°	80.4°	80.2°
Low	56.5°	61.4°	59.9°	59.3°
Mean	67.2°	71.8°	70.1°	69.7°
Precipitation	3.79"	4.12"	3.46"	11.37"
Snow	0.0"	0.0"	0.0"	0.0"
OBSERVED TEMPERATURE DAYS				
High 90° or above	3	9	4	16/92
Low 70° or above	1	11	7	19/92
High 32° or below	0	0	0	0/92
Low 32° or below	0	0	0	0/92
Low 0° or below	0	0	0	0/92
OBSERVED PRECIPITATION DAYS				
Days T+	14	15	20	49/92/53%
Days 0.01"+	10	11	16	37/92/40%
Days 0.10"+	7	8	10	25/92/27%
Days 0.25"+	6	6	7	19/92/21%
Days 0.50"+	2	5	2	9/92/10%
Days 1.00"+	0	1	0	1/92/1%

Table 2a

NOTABLE TEMP, PRECIP & SNOW DATES	JUN	JUL	AUG
90°+ Degree Date	90° (17th)	97° (1st)	90° (5th)
90°+ Degree Date	97° (18th)	97° (2 nd)	92° (6th)

90°+ Degree Date	94° (30th)	94° (3 rd)	96° (28th)
90°+ Degree Date	- ·	96° (4th)	96° (29 th)
90°+ Degree Date	-	92° (5th)	-
90°+ Degree Date	-	92° (9th)	-
90°+ Degree Date	-	92° (10 th)	-
90°+ Degree Date	-	93° (15th)	-
90°+ Degree Date	-	96° (16th)	-
Notable Hot Day (84.5°+ mean)	-	84.5° (1st)	85.5° (28th)
Notable Hot Day (84.5°+ mean)	-	87.0° (2 nd)	85.0° (29th)
1.00"+ Precipitation Date	-	1.13" (28th)	-
Heat Wave (High 90°+ for 3+ consecutive days)	30 th ->	->5 th (6 days)	-

Table 2b

RECORDS

ELEMENT	JUNE	
Daily Maximum Temperature Value/Date Previous Record/Year	97°/18 th	97°/1957
Daily High Minimum Temperature/Date Previous Record/Year	69°/1 st	67°/1937
Daily High Mean Temperature/Date Previous Record/Year	84.0°/18 th	82.5°/1994
Daily Maximum Wind Speed Value/Direction/Date Previous Record/Direction/Year	39 mph/W/14 th	36 mph/NW/1999
Daily Maximum Wind Speed Value/Direction/Date Previous Record/Direction/Year	37 mph/ NW/18 th	36 mph/S/1992
Top 200 Calmest Months Value/Rank Remarks	6.7 mph/#125	16-way tie

Table 3a

ELEMENT	JULY	
Daily High Minimum Temperature/Date Previous Record/Year	77°/2 nd	74/1887
Daily High Minimum Temperature/Date Previous Record/Year	74°/3 rd	74/2013
Daily High Minimum Temperature/Date Previous Record/Year	75°/5 th	74/1999
Daily High Minimum Temperature/Date Previous Record/Year	75°/24 th	74/1935
Daily High Mean Temperature/Date Previous Record/Year	87.0°/2 nd	85.0°/1901
Top 10 Warmest Julys Value/Rank Remarks	76.5°/#9	3-way tie
Top 10 Warmest Mean Maximum Julys Value/Rank Remarks	<mark>87.4°/#2</mark>	-
Top 200 All-Time Hottest Months Value/Rank Remarks	76.5°/#10	3-way tie
Daily Maximum Wind Speed Value/Direction/Date Previous Record/Direction/Year	48 mph/NW/27 th	44 mph/W/2005
Daily Maximum Wind Speed Value/Direction/Date Previous Record/Direction/Year	41 mph/NW/28 th	31 mph/NW/1989
Lowest Daily Average Wind Speed Value/Date Previous Record/Year	1.8 mph/7 th	2.3 mph/2010
Lowest Daily Average Wind Speed Value/Date Previous Record/Year	1.4 mph/19 th	1.4 mph/2004
Top 200 Calmest Months Value/Rank Remarks	5.7 mph/#37	9-way tie

Table 3b

ELEMENT	AUGUST	
Daily Maximum Temperature Value/Date Previous Record/Year	96°/29th	95°/1953
Daily High Minimum Temperature/Date Previous Record/Year	75°/28 th	72°/1992
Daily High Minimum Temperature/Date Previous Record/Year	74°/29 th	71°/1984
Daily High Mean Temperature/Date Previous Record/Year	85.5°/28 th	82.5°/1948
Daily High Mean Temperature/Date Previous Record/Year	85.0°/29 th	81.0°/1900
Top 10 Warmest Augusts Value/Rank Remarks	<mark>75.1°/#3</mark>	tie
Top 10 Warmest Mean Minimum Augusts Value/Rank Remarks	66.5°/# 1 *	*of record (since 1873).
Top 200 All-Time Hottest Dates Value/Date/Rank Remarks	66.5°/#24	4-way tie
Daily Maximum Wind Speed Value/Direction/Date Previous Record/Direction/Year	42 mph/N/4 th	33 mph/S/2017
Top 200 Calmest Months Value/Rank Remarks	5.7 mph/#37	10-way tie

Table 3c

ELEMENT	SUM	MER
Top 10 Hottest Summers	73.2°/#9	tie

Table 3d

Coming soon...

SKYWARN spotter training. Look for it at https://www.weather.gov/aly/

MISCELLANEOUS JUNE

	JOHE
Average Wind Speed/Departure from Normal	6.7 mph/-0.6 mph
Peak Wind/Direction/Date	39 mph/W/14 th
Windiest Day Average Value/Date	11.6 mph/14 th
Calmest Day Average Value/Date	2.6 mph/20 th
# Clear Days	1
# Partly Cloudy Days	22
# Cloudy Days	7
Dense Fog Dates (code 2)	$2^{ m nd}$
Thunder Dates (code 3)	1st, 13th, 18th & 28th
Sleet Dates (code 4)	None
Hail Dates (code 5)	None
Freezing Rain Dates (code 6)	None

Table 4a

JULY

	JOH
Average Wind Speed/Departure from Normal	5.7 mph/-1.0 mph
Peak Wind/Direction/Date	48 mph/NW/27 th
Windiest Day Average Value/Date	12.2 mph/6 th
Calmest Day Average Value/Date	1.4 mph/8 th & 19 th
# Clear Days	9
# Partly Cloudy Days	19
# Cloudy Days	3
Dense Fog Dates (code 2)	18 th , 26 th & 27 th
Thunder Dates (code 3)	5 th , 10 th , 16 th , 17 th , 27 th & 28 th
Sleet Dates (code 4)	None
Hail Dates (code 5)	None
Freezing Rain Dates (code 6)	None

Table 4b

AUGUST

Average Wind Speed/Departure from Normal	5.7 mph/-0.4 mph
Peak Wind/Direction/Date	42 mph/N/4 th
Windiest Day Average Value/Date	10.5 mph/21st
Calmest Day Average Value/Date	1.7 mph/5 th
# Clear Days	3
# Partly Cloudy Days	21
# Cloudy Days	7
Dense Fog Dates (code 2)	18 th
Thunder Dates (code 3)	1st, 3rd, 4th, 7th, 8th, 14th, 17th & 29th
Sleet Dates (code 4)	None
Hail Dates (code 5)	None
Freezing Rain Dates (code 6)	None

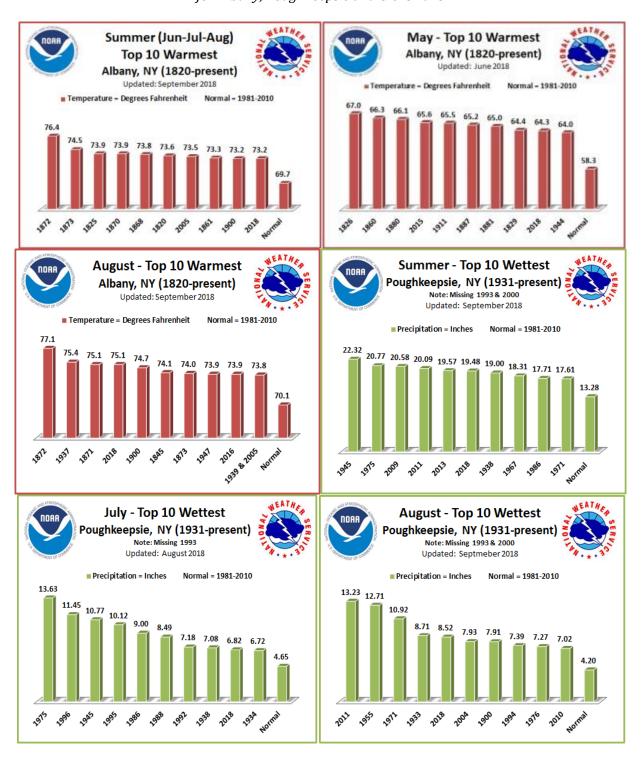
Table 4c

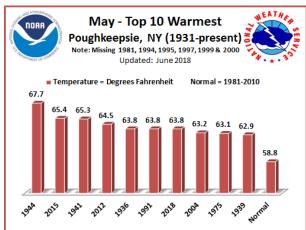
SIGN UP AND BECOME A PART OF THE ACTION!

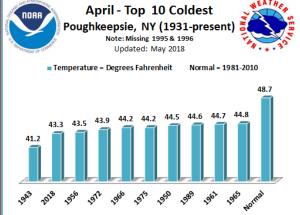


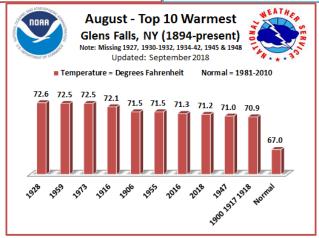
FALL SESSIONS COMING SOON: https://www.weather.gov/aly/

The summary bar graph charts that follow were created and provided by NWS Albany meteorologist Ingrid Amberger to highlight the most significant climatic outcomes for selected seasons and months for Albany, Poughkeepsie and Glens Falls.









For more climate data and records, please visit our enhanced climate page at: www.weather.gov/aly/Climate

WEATHER WORD FIND

by Tom Wasula

Each word will be found in any one of 8 directions (vertical, horizontal or diagonals/forwards or backwards)

The solution to this puzzle will be provided in the Spring, 2019 issue.

Fall, 2018 Winter Weather

W L Q H L Z E H R Z D N Y C V T L K V G UAVGBKGEIBSPBAWFCHDM G K B D O I P X Y P D M Q K B M O C F S EESEUPCHPENDMLKEHHFZ LEPMIZGETFIFPXMMTSOC T F R L H N V M J T W Q I W D X N N W B A F C C B Z H Y B A M D T G Q L C S M A CEENINDBNRMSRSFDTEUA UCWIYPAOQDYJLAOLBIAT X T U W Y B R D Z C R H Y A Z R I R C J M F O G F E L L I H C D N I W Z F R F C H N X T A P T B D I Y Q G Q L F I U P R SIUSFREEZEBRKMPONLXJ Q L T C C O R X P Q S A R L O X B F B M HENWDDSPEEQUSTYARFLB RIJCXLNSFHIJQEZALGID NZCAEOIHGROYUEJJCKZU H S P E R V W D F V Y V A W Z P V G B Z AQTCPILOMYEALQBGTWSR SOYHCZFVMVAYLWQTLPBW

BLIZZARD FOG GLAZE NOREASTER SQUALL CLIPPER FREEZE ICEJAM SLEET WIND FLURRIES FROST LAKEEFFECT SNOW WINDCHILL

Spring, 2018 Solution

```
+ + H + L + + + + R + + L + +
+ M + U + I + + + A + + I + +
+ + R + R + V + + I + + A + +
 + + 0 + R + N + N + + H + +
+ + + + T + I + A B + + + + +
 + + + + S + C + O + + D
+ + + + + + R + A W + O + S +
S D U O L C T E + N O + + R +
+ + + + + A T + D L E + + U +
+ + + + E O + + F N + + + B +
+ + + H R + + H + + U + + O +
+ W I N D + S + + + + H + R +
+ + A + + A + + + + + T C +
+ D + + L I G H T N I N G I +
0 + + F + + + + + + + + + M +
    (Over, Down, Direction)
        ANVIL(9,5,NW)
        CLOUDS(6,8,W)
     FLASHFLOOD(4,15,NE)
        HAIL(13,4,N)
        HEAT(4,11,NE)
      HURRICANE(3,1,SE)
      LIGHTNING(5,14,E)
     MICROBURST(14,15,N)
       RAINBOW(10,1,S)
    THUNDERSTORM(13,13,NW)
       TORNADO(7,9,SW)
        WIND(2,12,E)
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From the Editor's Desk

It was a cold spring, and a hot and relatively busy summer. The climate tables for the past two seasons highlight all the extremes, and all the records we keep tab of. We've also included some graphs for Albany, as well as Glens Falls and Poughkeepsie, two stations that have recently added to their climate records inventory.

Upper Air and CoCoRaHS are two important programs here at Albany. You can watch a video link we've prepared here at our office showing you how we launch weather balloons, and get an idea what CoCoRaHS Observer Appreciation Day will be like in October. This year being the $10^{\rm th}$ Anniversary, our WCM revisits the widespread ice storm of December 10-11, 2018, and we've included some really cool pictures.

As we translate into the colder seasons, it's only appropriate that the Weather Word Find puzzle in this issue focuses on winter weather. We've begun the season on the mild side, and it appears there is quite a lag in the foliage color change as I write this during the last week of September. It will be interesting to see how our weather pattern evolves. See you in spring.

WCM Words

Steve DiRienzo Warning Coordination Meteorologist, NWS Albany

This year marks the 10th anniversary of the widespread ice storm of December 10-11, 2008. This ice storm affected an area that extended from northeast Pennsylvania and northwestern New Jersey, northeast across parts of eastern New York, northwest Connecticut and northwestern Massachusetts, to southern New Hampshire and Maine.

Precipitation came down heavy at times on the night of December 10-11. Thunder was even reported in Glens Falls. By the time the precipitation tapered off Friday morning, ice accumulations ranged from around half of an inch up to an inch across portions of the Capital District and the Berkshires. North and west of the Capital District, temperatures were colder aloft, and snow and sleet fell. Snowfall reports ranged from 2 to 4 inches just north and west of the Capital District, where sleet mixed in along with lesser ice accumulations, up to 8 to 12 inches across portions of the southern Adirondacks.

There was widespread tree and power line damage across the local area. An estimated 350,000 utility customers lost power across East Central New York and adjacent western New England. Over 60,000 customers were still out of power Monday morning, December 15^{th} , and over 10,000 customers were still out of power Wednesday morning, December 17^{th} , one week after the storm.

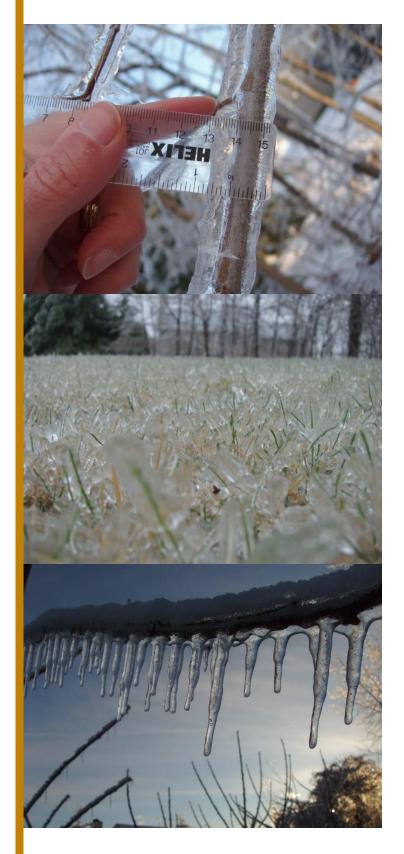
In Litchfield County, CT, there was river flooding and power outages from heavy freezing rain *at the same time*. In the wake of the storm, schools and some businesses were closed, sump pump batteries failed due to prolonged power outages, and flooded basements were common. Cold temperatures over the weekend after the storm, led to the opening of warming shelters for people who did not have heat. The cold temperatures also led to concern about frozen pipes in homes without heat.

The Ice Storm of December, 2008, is an example of how large storms can lead to societal disruption. The mission of the National Weather Service is to provide weather, water, climate data, and forecasts and warnings for the protection of life and property, and enhancement of the national economy.

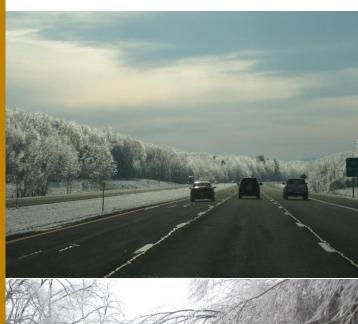
When we issue watches and warnings ahead of a storm, our goal is to give you lead time to prepare before the storm arrives.

When you need timely weather or hydrologic information...you can get it on NOAA Weather Radio. Your Albany National Weather Service forecast information is also available online and on social media. You can reach us at weather.gov/albany, like us on Facebook, and tweet along on Twitter @ nwsalbany. For weather and hydrologic information on the go, simply go to mobile.weather.gov and provide your location or zip code.

Here at the National Weather Service, we strive to be the source of unbiased, reliable and consistent weather information. We're here to answer your weather and water questions 24 hours a day, 7 days a week. If you have concerns, please call us. If you have comments on Northeastern StormBuster, or any of the operations of the National Weather Service, please let me know at Stephen.DiRienzo@noaa.gov.













Some images from the ice storm. All photos courtesy of Neil Stuart, Ingrid Amberger or Judy Hagemann.