NORTHEASTERN STORM BUSTER

Fall, 2017 - VOL. 22, NO. 3
Evan L. Heller, Editor/Publisher
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FEATURES

DEPARTMENTS

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.

30TH ANNIVERSARY OF THE OCTOBER 4, 1987 SNOWSTORM

Neil A. Stuart
Senior Forecaster, NWS Albany

"Hey Neil, wake up, it's snowing out!" I couldn't help but be annoyed that my college friends were waking me up early on a Sunday morning when I planned to sleep a little more before we got up for our scheduled intramural softball game. We had been out late the night before in the cold rain and I remember being impressed that the temperatures were in the upper 30s when I went to sleep; quite cold for a rainy early October night.

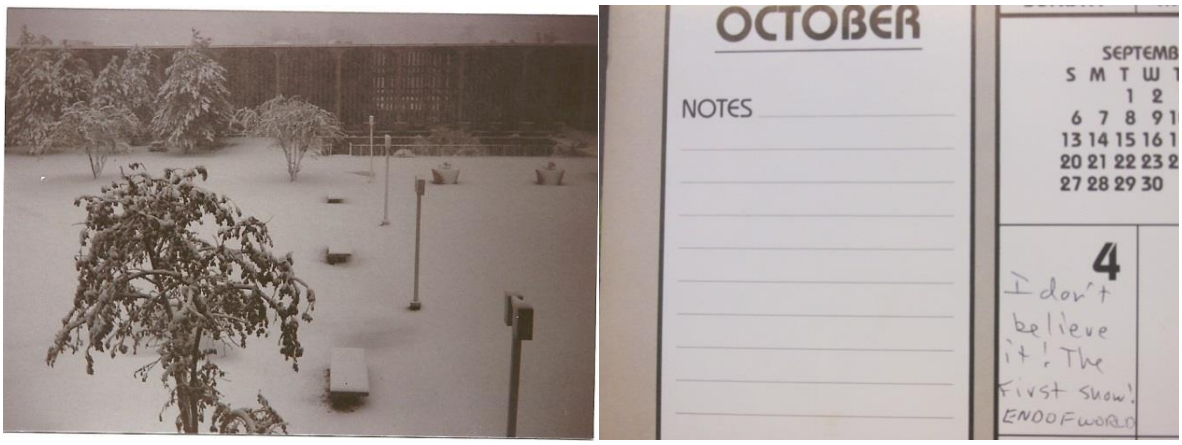
"Cut it out guys, quit joking around, I'm going back to sleep for a little while before we have to play softball" was my feeble response. "No, really, look out your window, it's snowing out", they insisted. I opened my eyes and turned over to look out my 3rd-floor dormitory window on Colonial Quad at the University at Albany and I was speechless. Needless to say, our softball game that day was cancelled.

Above: Neil and a friend in the snow on Colonial Quad during the morning of October 4, 1987.

My friends and I immediately ran outside to see what was happening and how deep the snow was. We knew how unusual this event was and just had to document it with pictures. Not many other students were up at the time, and those who were awake had no desire to get cold and wet in the snow, longing, instead, for the warmth and colored leaves of early autumn.

By the time the snow ended late in the morning, I measured 7" of it in the open area outside my dormitory room and in front of the Colonial Quad tower. My friend, who did

not like snow and was particularly annoyed that it had come so early, wrote a message on my wall calendar in the Sunday, October 4 block that simply said "END OF WORLD".



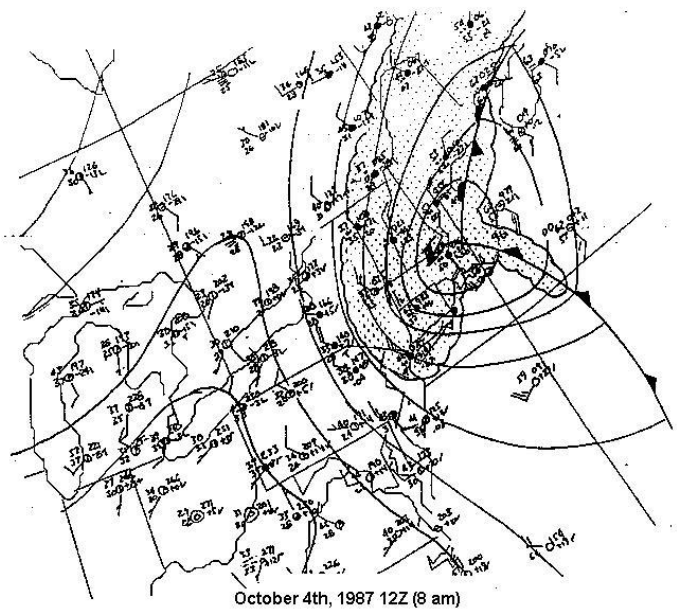
Above: (Left) A view across Colonial Quad, and; (right) the calendar entry from me and my college friend for October 4, 1987.

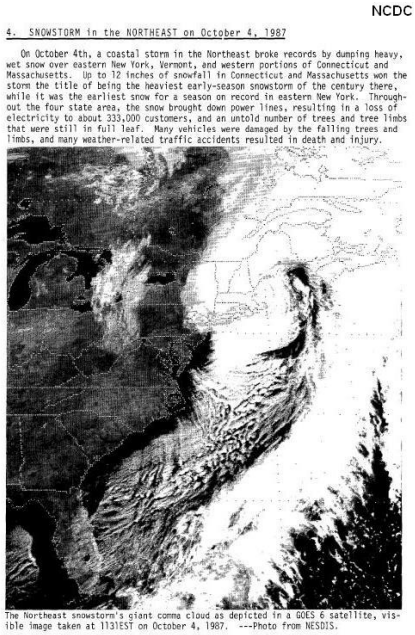
When I watched the news that evening, my friends and I realized just how destructive the snowstorm was. The University at Albany had its own generators and we never lost electricity in the dormitories. The snowstorm was completely un-forecasted, and a surprise of this magnitude, with the destruction and hardship that resulted, was very troubling. As an undergraduate student in the University at Albany Atmospheric Science Department, I knew this was the storm of a lifetime and that it needed to be studied further so we would never again be caught off guard with another unwelcome surprise like this.

As we returned to classes the next day, and as the week pushed on, the true extent of the damage and impact to upstate New York and the Berkshires became apparent. Hundreds of thousands of people were without power because the heavy wet snow brought down trees that still had all their leaves, dragging power poles and power lines down with them. Albany International Airport measured 6.5" of snow, while areas in the Catskills received nearly 2 feet of snow, and the Berkshires, over a foot. Our region returned to high temperatures in the 60s over the next several days, melting most of the snow quickly. By the middle of the week, all that was left to indicate that a snowstorm had occurred was all the downed trees and power lines.

I remember the first statement my college professor made in class was that the forecast models had the storm nailed. Of course he said that for dramatic effect and once he had our attention, he said that the forecast models had actually showed a rainstorm, not a snowstorm. We all agreed much more research would be needed to determine how it turned into an unexpected snowstorm. We analyzed all the difax maps, printouts of various analyses and satellite picture printouts. Back in 1987, we had to be patient and wait hours for routine printouts of forecast model data and satellite images, unlike in 2017, with the instantaneous and nearly unlimited data and forecast model displays available on the

internet and across social media. Because my friends and I were only undergraduate students, we could not yet fully understand the complex atmospheric processes that contributed to the surprise snowstorm; but events like this made us even more eager to learn.

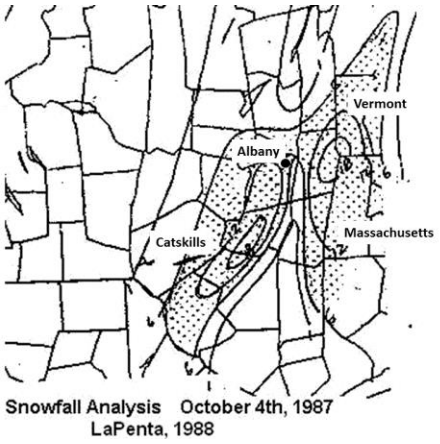


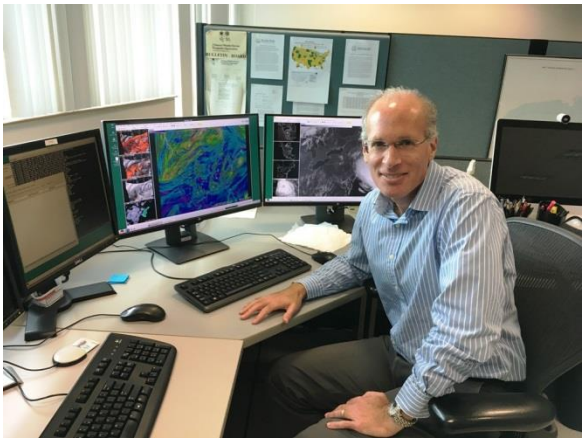


Above: An old difax-printed surface map of the storm, and a GOES-6 satellite image, at 8 AM October 4, 1987.

The University at Albany and the National Weather Service both conducted extensive research into the storm and published landmark studies that identified the atmospheric features that contributed to its formation. These studies are recognized internationally as important references for all forecasters that are being trained early in their careers to help them better forecast these types of events. Since 1987, the accuracy of predicting these off-season storms that feature rain changing to heavy snow has greatly improved, thanks to the research conducted by the National Weather Service and our collaborations with the University at Albany Department of Atmospheric and Environmental Sciences.

Today, the National Weather Service and the University at Albany Department of Atmospheric and Environmental Sciences work closer than ever to combine our knowledge and resources in solving complex forecasting problems, under a research grant called Collaborative Science Technology, and Applied Research (CSTAR). We will continue to learn the hidden secrets of the atmosphere that produce high-impact weather, including snowstorms, ice storms, floods, tornadoes, hurricanes and any other weather events that threaten New York and the northeast U.S. We won't rest until we can predict these events with enough lead time so that everyone is prepared and there are no surprises, like back on that fateful day, October 4, 1987.





Above: (Left) Hand analysis of snowfall on October 4, 1987 by retired NWS meteorologist Ken LaPenta. (Right) Neil, 30 years later in 2017 at his workstation at the National Weather Service in Albany, NY, analyzing the latest weather forecasts.

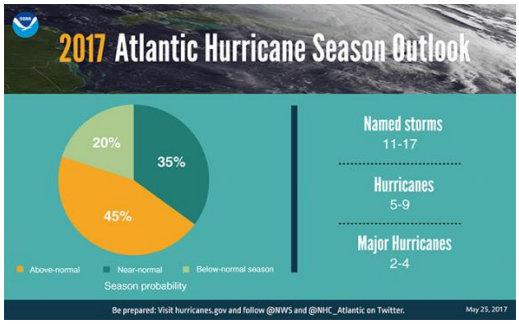
TROPICAL REVIEW THUS FAR

Brian Montgomery
Senior Meteorologist, NWS Albany

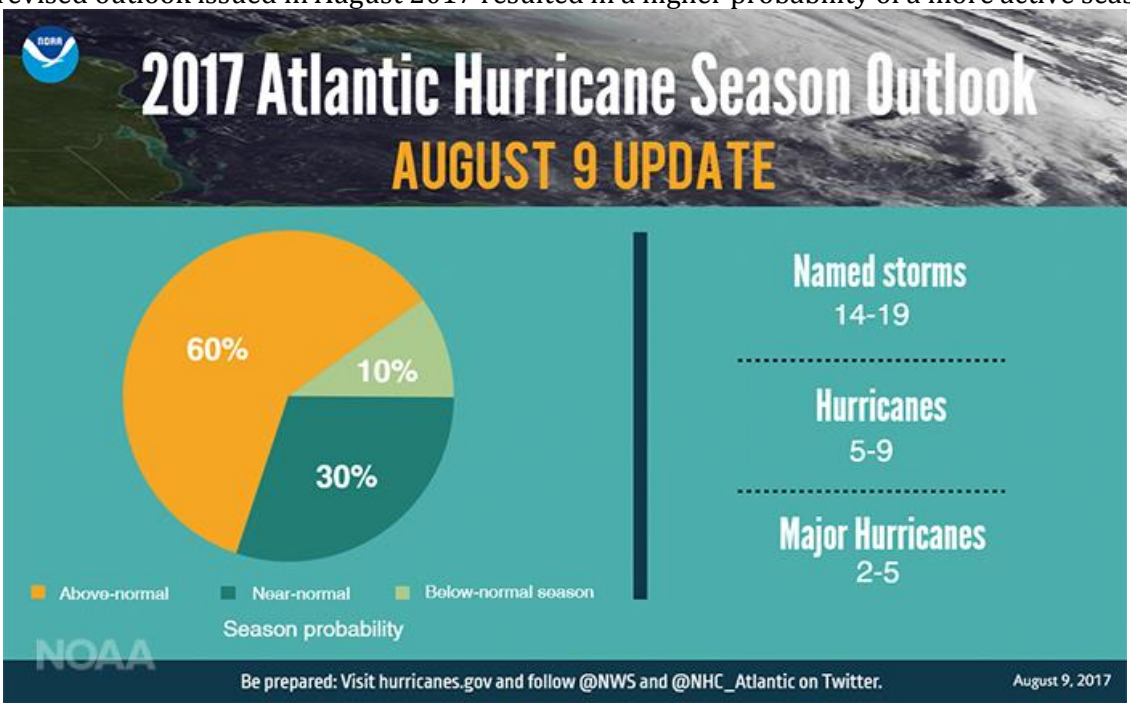
The 2017 hurricane season continues as per the timing of this article. We are just past the climatological peak of the season…the month of September. So, let's take a preliminary look back at the season thus far, comparing the Atlantic Hurricane Season Outlooks to the actual results.

Before any official outlooks were issued, this year's hurricane season began back in April with the development of 'Arlene'. Per the National Hurricane Center, "Tropical storms in April are rare, and Arlene is only the second one observed in this month during the satellite era. It should be noted, however, that this type of storm was practically impossible to detect prior to the weather satellite era."

As the official start of hurricane season in the Atlantic Basin begins June 1, annually, here was the initial outlook issued by the NOAA Climate Prediction Center:



The revised outlook issued in August 2017 resulted in a higher probability of a more active season:

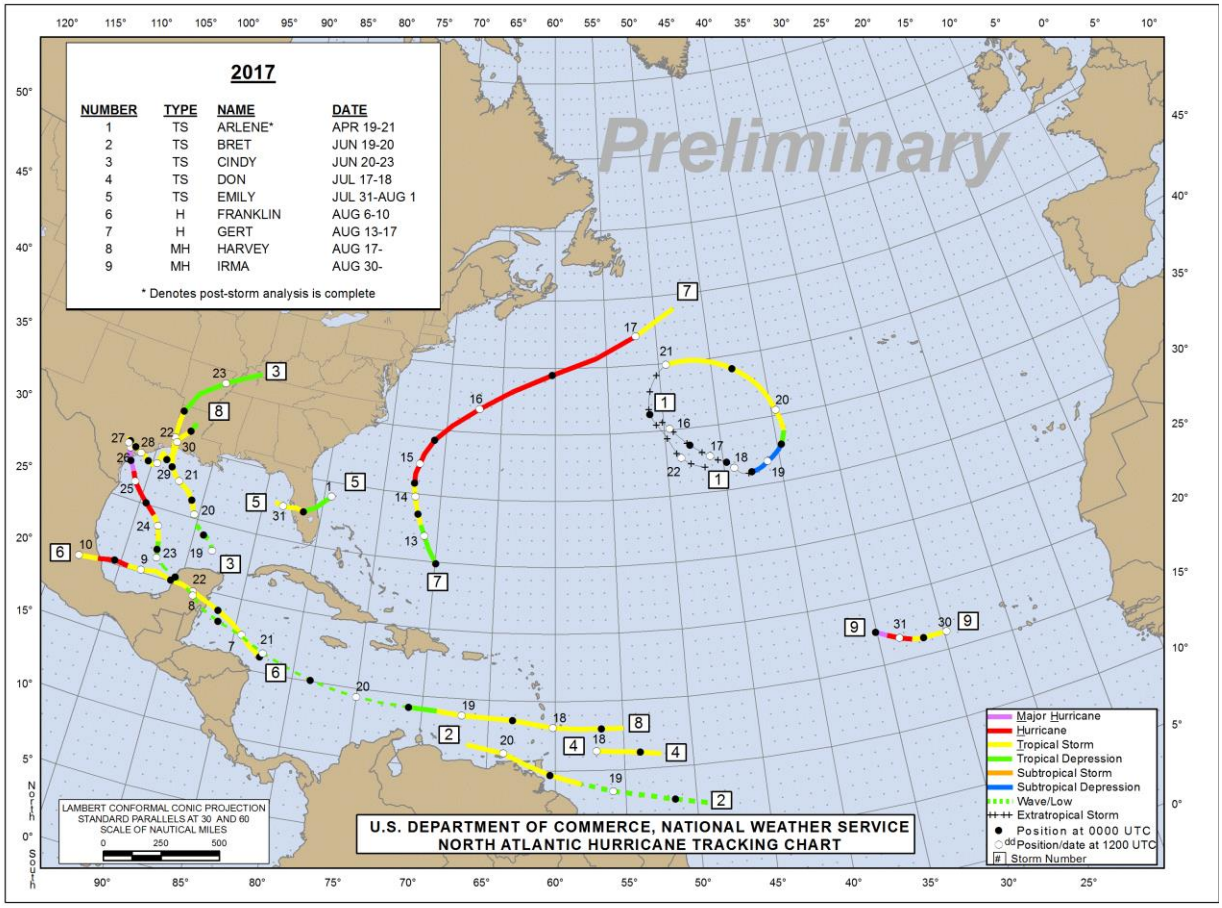


Here are the preliminary tropical weather storm summaries through September:

Summary Table

Name	Dates	Max Wind (mph)
Tropical Storm Arlene	19-21 April	50
Tropical Storm Bret	19-20 June	45
Tropical Storm Cindy	20-23 June	60
Tropical Depression Four	6-7 July	30
Tropical Storm Don	17-18 July	50
Tropical Storm Emily	31 July-1 August	45
Hurricane Franklin	6-10 August	85
Hurricane Gert	13-17 August	105
Potential Tropical Storm 10	27-29 August	40
Major Hurricane Harvey	17-30 August	130
Major Hurricane Irma	30 Aug-11 September	185
Major Hurricane Jose	5-22 September	155
Hurricane Katia	5-9 September	105
Hurricane Lee	14-? September	90*
Major Hurricane Maria	16-? September	175*

*Ongoing tropical activity at the time of this article. Please refer to the National Hurricane Center for the latest forecast updates: www.hurricanes.gov



In addition, there were a couple of milestones in the Atlantic during the month of September: We had two storms with 150+ mph winds going on simultaneously. This is on record as being the first time that this had ever occurred. Furthermore, we had three (3) Category 2+ hurricanes in the Atlantic simultaneously. The last time that this happened was in 1893 (all data preliminary at this time). Major Hurricane Maria recorded the 10th-lowest barometric pressure ever seen in the Atlantic Basin, with a value of 908 mb (26.81 inches).

Hurricane season continues through November 30th; thus, we encourage you to keep www.hurricanes.gov, and www.weather.gov fresh in your weather bookmarks for all of the latest tropical updates from your National Weather Service. You can also follow updates on social media via Facebook and Twitter.

We are presently planning our SKYWARN training sessions for fall. Please check https://www.weather.gov/aly/ periodically for updates.

CHANGES FOR THE 2017-18 WINTER SEASON

Ingrid Amberger
Senior Meteorologist, NWS Albany

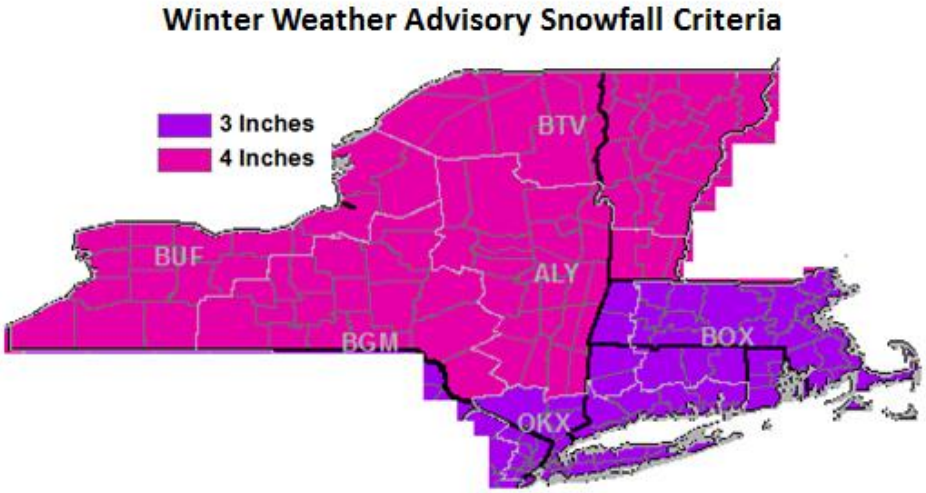
There will be some changes to our snowfall criteria for issuing Winter Storm Warnings and Winter Weather Advisories this season for our western New England counties: Litchfield County, Connecticut; Berkshire County, Massachusetts, and; Bennington and Windham counties in Vermont. These changes are being made so the snowfall criteria for issuing these winter weather headlines will be uniform across each state.

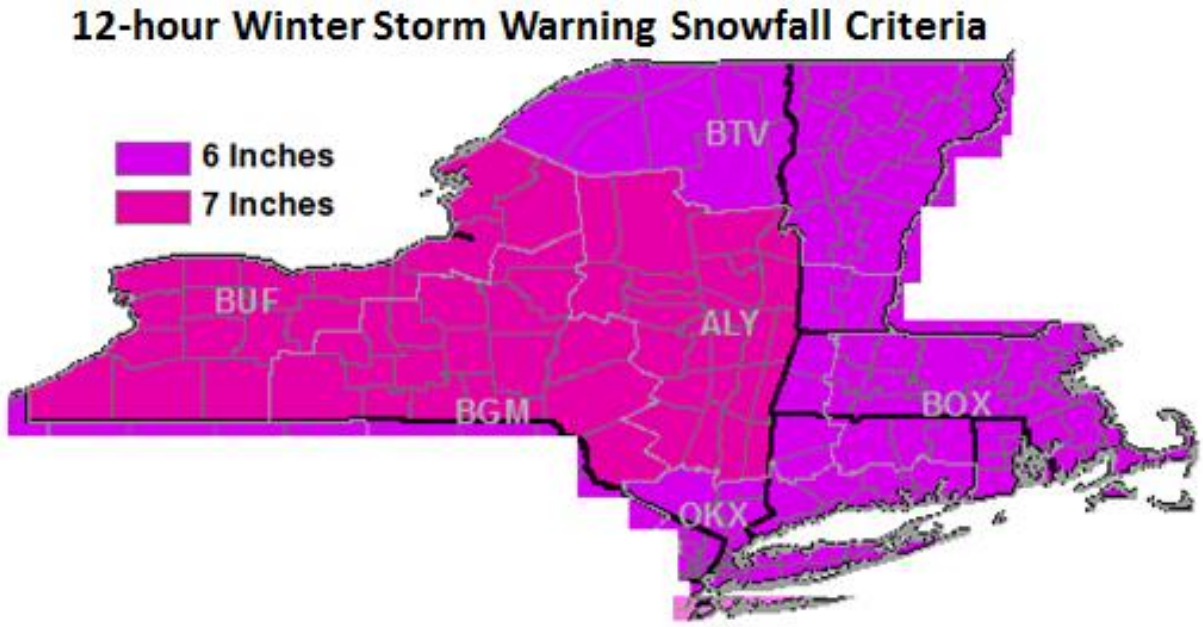
Winter Storm Warnings are issued when severe winter conditions are expected, and Winter Weather Advisories, when winter conditions are expected to cause significant inconvenience and possible hazardous conditions.

For Litchfield County, Connecticut and Berkshire County, Massachusetts the snowfall criteria for Winter Weather Advisories has been changed to 3 inches. The 12-hour snowfall criteria for Winter Storm Warnings has been changed to 6 inches, and the 24-hour criteria, to 8. Each of these values was lowered by an inch.

The only change for Bennington and Windham Counties in Vermont is to the 12-hour snowfall criteria for Winter Storm Warnings, which will now be 6 inches instead of 7. The 24-hour criteria remains at 9 inches, and the Winter Weather Advisory criteria, at 4.

No changes were made to our New York counties. The snowfall criteria for Winter Weather Advisories remains at 4 inches, the 12-hour criteria for Winter Storm Warnings, 7, and the 24-hour criteria, 9.





In addition, based on feedback from surveys the National Weather Service conducted, and results of social science research for the National Weather Service's Hazard Simplification Project, we will be reducing the number of types of winter watches and advisories that are issued.

Current Winter Watch Products
Winter Storm Watch
Lake Effect Snow Watch
Blizzard Watch

Consolidate To → Winter Storm Watch

Current Winter Advisory Products
Lake Effect Snow Advisory
Winter Weather Advisory
Freezing Rain Advisory

Consolidate To → Winter Weather Advisory

The following types of winter warnings will continue to be issued:

Winter Warning Products
Winter Storm Warning
Lake Effect Snow Warning
Blizzard Warning
Ice Storm Warning

Finally, the format for all winter products will be changed to "What, Where, When" format with "Additional Details" and "Precautionary/Preparedness Actions" statements.

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...WINTER STORM WATCH IN EFFECT FROM SUNDAY AFTERNOON THROUGH LATE MONDAY
NIGHT...
* WHAT...Blizzard Conditions Possible. Heavy snow along with significant
  blowing and drifting snow. Snow accumulations of 16 to 24 inches possible.
  Northeast winds 25 to 40 mph with gusts up to 50 mph inland and up to 60
  mph along the coast.

* WHERE...Bangor region and Downeast.

* WHEN...Late Sunday afternoon through late Monday night. The worst
  conditions will be during the day Monday.

* ADDITIONAL DETAILS: Snow and strong winds will create very hazardous
  conditions, and travel may become impossible. Blowing and drifting snow
  will cause blizzard conditions and whiteouts at times.

PRECAUTIONARY/PREPAREDNESS ACTIONS:
Travel may become impossible. Plan ahead accordingly.
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For detailed information about the National Weather Service's Hazard Simplification Project, please visit https://www.weather.gov/hazardsimplification/.

ALBANY SEASONAL CLIMATE SUMMARY

Evan L. Heller, Climatologist

Records or values of note highlighted in yellow.

SPRING 2017

STATS

	MAR	APR	MAY	SEASON
Average High Temperature/Departure from Normal	40.6°/-3.8°	63.3°/+5.0°	66.7°/-2.7°	56.9°/-0.5°
Average Low Temperature/Departure from Normal	22.8°/-2.9°	42.7°/+5.4°	48.1°/+1.0°	37.9°/+1.2°
Mean Temperature/ Departure From Normal	31.7°/-3.3°	53.0°/+5.2°	57.4°/-0.9°	47.4°/+0.4°
High Daily Mean Temperature/Date	59.5°/1st	72.5°/11th	78.0°/18th	
Low Daily Mean Temperature /Date	14.5°/11th & 12th	38.5°/1st	44.0°/8th	
Highest Temperature reading/Date	66°/1st	87°/11th & 16th	94°/18th	
Lowest Temperature reading/Date	5°/5th	27°/9th	36°/4th & 10th	
Lowest Maximum Temperature reading/Date	22°/11th	44°/1st	49°/8th	
Highest Minimum Temperature reading/Date	53°/1st	60°/28th	62°/18th	
Total Precipitation/Departure from Normal	4.07"/+0.96"	2.88"/-0.29"	5.98"/+2.37"	12.93"/+2.94"
Total Snowfall/Departure from Normal	19.4"/+9.2"	0.2"/-2.1"	Trace/-0.1"	19.6"/+7.0"
Maximum Precipitation/Date	1.58"/14th	0.95"/4th	0.80"/30th	
Maximum Snowfall/Date	17.0"/14th	0.2/1st	Trace/9th	

Table 1

NORMALS, OBSERVED DAYS & DATES

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	2	2/92
Low 70° or above	0	0	0	0/92
High 32° or below	8	0	0	8/92
Low 32° or below	23	2	0	25/92
Low 0° or below	0	0	0	0/92
OBS. PRECIPITATION DAYS				
Days T+	19	20	21	60/92/65%
Days 0.01"+	12	16	17	35/92/38%
Days 0.10"+	6	7	13	26/92/28%
Days 0.25"+	3	3	9	15/92/16%
Days 0.50"+	2	2	5	9/92/10%
Days 1.00"+	2	0	0	2/92/2%

Table 2a

NOTABLE TEMP, PRECIP & SNOW DATES	MAR	APR	MAY
Last Snowfall	-	-	9th (trace)
Last Freeze	-	9th (27°)	-
90+ Degree Date	-	-	92°/17th
90+ Degree Date	-	-	94°/18th
1.00"+ Precipitation Date	14th (1.58")	-	-
1.00"+ Precipitation Date	31st (1.18")	-	-
Significant Snow Event	17.0" (14th)		

Table 2b

RECORDS

ELEMENT	MARCH	
Daily Maximum Temperature Value/Date | Previous Record/Year	66°/1st	61°/1991
Daily High Minimum Temperature/Date | Previous Record/Year	53°/1st	47°/1954
Daily High Mean Temperature/Date | Previous Record/Year	59.5°/1st	54.0°/1954
Daily Maximum Snowfall Value/Date | Previous Record/Year	17.0"/14th	12.9"/1958
Daily Maximum Wind Speed Value/Direction/Date | Previous Record/Direction/Year	54 mph/W/2nd	51 mph/W/2015
Daily Maximum Wind Speed Value/Direction/Date | Previous Record/Direction/Year	46 mph/SW/8th	46 mph/W/2012
Daily Maximum Wind Speed Value/Direction/Date | Previous Record/Direction/Year	45 mph/W/11th	44 mph/NW/2009

Table 3a

ELEMENT	APRIL	
Daily Maximum Temperature Value/Date | Previous Record/Year	87°/11th	82°/2011
Daily High Minimum Temperature/Date | Previous Record/Year	58°/11th	55°/1922
Daily High Minimum Temperature/Date | Previous Record/Year	56°/16th	55°/1993
Daily High Mean Temperature/Date | Previous Record/Year	65.5"/10th	65.0"/1922
Daily High Mean Temperature/Date | Previous Record/Year	72.5°/11th	67.5°/1922
Daily High Mean Temperature/Date | Previous Record/Year	71.5°/16th	71.0°/2002
Top 10 Warmest Aprils Value/Rank | Remarks	53.0°/#4	-
Top 10 Warmest Mean Maximum Aprils Value/Rank | Remarks	63.3°/#6	-
Top 10 Warmest Mean Minimum Aprils Value/Rank | Remarks	42.7°/#2	tie

Table 3b

ELEMENT	MAY	
Daily Maximum Temperature Value/Date | Previous Record/Year	92°/17th	89°/1977
Daily Maximum Temperature Value/Date | Previous Record/Year	94°/18th	94°/1962
Daily High Mean Temperature/Date | Previous Record/Year	73.5°/17th	73.5°/1889
Daily Maximum Wind Speed Value/Direction/Date | Previous Record/Direction/Year	50 mph/W/18th	37 mph/S/2000
Top 200 All-Time Wettest Months Value/Rank | Remarks	5.98"/#129	tie

Table 3c

ELEMENT	SPRING	
none	-	-

Table 3d

MISCELLANEOUS
MARCH

Average Wind Speed/Departure from Normal	10.6 mph/+1.0 mph
Peak Wind/Direction/Date	54 mph/W/2nd
Windiest Day Average Value/Date	18.8 mph/2nd
Calmest Day Average Value/Date	2.0 mph/18th
# Clear Days	14
# Partly Cloudy Days	12
# Cloudy Days	5
Dense Fog Dates (code 2)	4th & 11th
Thunder Dates (code 3)	None
Sleet Dates (code 4)	4th
Hail Dates (code 5)	None
Freezing Rain Dates (code 6)	1st, 2nd & 4th

Table 4a

APRIL

Average Wind Speed/Departure from Normal	8.4 mph/-0.8 mph
Peak Wind/Direction/Date	41 mph/NW/8th
Windiest Day Average Value/Date	15.6 mph/8th
Calmest Day Average Value/Date	1.7 mph/14th
# Clear Days	1
# Partly Cloudy Days	17
# Cloudy Days	12
Dense Fog Dates (code 2)	None
Thunder Dates (code 3)	6th
Sleet Dates (code 4)	1st
Hail Dates (code 5)	None
Freezing Rain Dates (code 6)	None

Table 4b

MAY

Average Wind Speed/Departure from Normal	7.8 mph/-0.1 mph
Peak Wind/Direction/Date	50 mph/W/18th
Windiest Day Average Value/Date	16.5 mph/15th
Calmest Day Average Value/Date	2.7 mph/13th
# Clear Days	0
# Partly Cloudy Days	15
# Cloudy Days	16
Dense Fog Dates (code 2)	None
Thunder Dates (code 3)	1st, 18th, 30th & 31st
Sleet Dates (code 4)	9th
Hail Dates (code 5)	31st
Freezing Rain Dates (code 6)	None

Table 4c

SUMMER 2017

STATS

	JUN	JUL	AUG	SEASON
Average High Temperature/Departure from Normal	78.3°/+0.4°	81.2°/-1.1°	79.4°/-1.0°	79.6°/-0.6°
Average Low Temperature/Departure from Normal	57.6°/+1.1°	62.3°/+0.9°	59.1°/-0.8°	59.7°/+0.4°
Mean Temperature/ Departure From Normal	68.0°/+0.8°	71.7°/-0.1°	69.2°/-0.9°	69.6°/-0.1°
High Daily Mean Temperature/Date	80.0°/18th	81.0°/29th	78.5°/22nd	
Low Daily Mean Temperature /Date	53.0°/6th	62.5°/25th	59.0°/29th	
Highest Temperature reading/Date	95°/12th	88°/20th	89°/22nd	
Lowest Temperature reading/Date	44°/2nd	52°/30th	49°/26th & 27th	
Lowest Maximum Temperature reading/Date	56°/6th	67°/25th	64°/29th	
Highest Minimum Temperature reading/Date	72°/18th	70°/1st	71°/18th	
Total Precipitation/Departure from Normal	5.12"/+1.33"	4.01"/-0.11"	3.76"/+0.30"	12.89"/+1.52"
Total Snowfall/Departure from Normal	0.0"/-	0.0"/-	0.0"/-	0.0"/-
Maximum Precipitation/Date	1.48"/5th	1.30"/17th	1.72"/18th	
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	0	0	3/92
Low 70° or above	2	1	2	5/92
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+	18	16	16	50/92/54%
Days 0.01"+	14	12	9	35/92/38%
Days 0.10"+	10	8	5	23/92/25%
Days 0.25"+	6	5	5	16/92/17%
Days 0.50"+	4	4	3	11/92/12%
Days 1.00"+	2	1	1	4/92/4%

Table 2a

NOTABLE TEMP, PRECIP & SNOW DATES	JUN	JUL	AUG
90°+ Degree Date	92° (11th)	-	-
90°+ Degree Date	95° (12th)	-	-
90°+ Degree Date	91° (13th)	-	-
1.00"+ Precipitation Date	1.48" (5th)	1.30" (17th)	1.72"/18th
1.00"+ Precipitation Date	1.12" (19th)	-	-

Table 2b

RECORDS

ELEMENT	JUNE	
Daily Maximum Temperature Value/Date | Previous Record/Year	95°/12th	94°/1949
Heat Wave (3+ consecutive days 90°+)	11th–13th	-

Table 3a

ELEMENT	JULY	
Daily Low Maximum Temperature Value/Date | Previous Record/Year	67°/25th	70°/1911
200 All-Time Hottest Months Value/Rank | Remarks	71.7°/#193	6-way tie

Table 3b

ELEMENT	AUGUST	
200 All-Time Wettest Dates Value/Date/Rank | Remarks	1.72"/18th/#177	3-way tie
Daily Maximum Wind Speed Value/Direction/Date | Previous Record/Direction/Year	33 mph/S/4th	32 mph/W/2013
Daily Maximum Wind Speed Value/Direction/Date | Previous Record/Direction/Year	29 mph/S/6th	28 mph/S/2013
Daily Maximum Wind Speed Value/Direction/Date | Previous Record/Direction/Year	49 mph/W/22nd	49 mph/W/2011

Table 3c

ELEMENT	SUMMER	
none	none	none

Table 3d

MISCELLANEOUS

JUNE

Average Wind Speed/Departure from Normal	7.2 mph/-0.1 mph
Peak Wind/Direction/Date	37 mph/W/25th
Windiest Day Average Value/Date	13.4 mph/18th
Calmest Day Average Value/Date	3.4 mph/22nd
# Clear Days	6
# Partly Cloudy Days	21
# Cloudy Days	3
Dense Fog Dates (code 2)	1st & 30th
Thunder Dates (code 3)	5th, 9th, 13th, 19th, 26th, 27th & 30th
Sleet Dates (code 4)	None
Hail Dates (code 5)	None
Freezing Rain Dates (code 6)	None

Table 4a

JULY

Average Wind Speed/Departure from Normal	5.5 mph/-1.2 mph
Peak Wind/Direction/Date	32 mph/W/24th
Windiest Day Average Value/Date	10.3 mph/6th
Calmest Day Average Value/Date	1.3 mph/18th
# Clear Days	5
# Partly Cloudy Days	20
# Cloudy Days	6
Dense Fog Dates (code 2)	18th, 26th & 27th
Thunder Dates (code 3)	1st, 7th, 8th, 12th, 13th, 17th & 24th
Sleet Dates (code 4)	None
Hail Dates (code 5)	None
Freezing Rain Dates (code 6)	None

Table 4b

SIGN UP AND BECOME A PART OF THE ACTION!

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

AUGUST

Average Wind Speed/Departure from Normal	5.6 mph/-0.5 mph
Peak Wind/Direction/Date	49 mph/W/22nd
Windiest Day Average Value/Date	11.9 mph/4th
Calmest Day Average Value/Date	1.2 mph/28th
# Clear Days	3
# Partly Cloudy Days	25
# Cloudy Days	3
Dense Fog Dates (code 2)	18th
Thunder Dates (code 3)	5th, 12th & 22nd
Sleet Dates (code 4)	None
Hail Dates (code 5)	None
Freezing Rain Dates (code 6)	None

Table 4c

For more climate data and records, please visit our climate page at:
www.weather.gov/albany/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, 2018 issue.

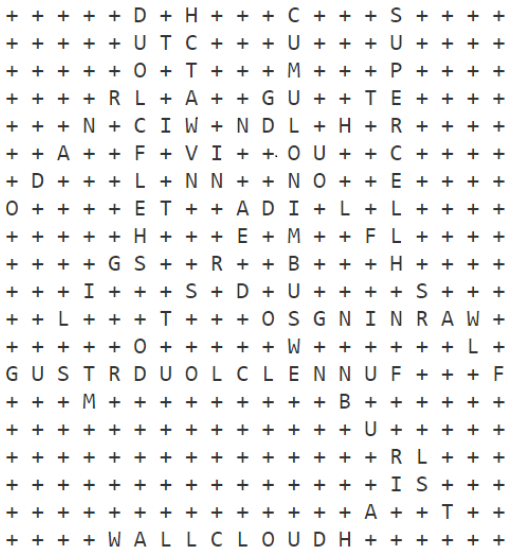
Cool Season Weather

R L B O M R O T S W O N S S I	FROST
M E X S V U U F N O X N H N C	FREEZE
C B Z I Z J P R I V I O T O Q	NOREASTER
D R T E Z L X O A L N R K W U	CLIPPER
R Q Q C E S D S R F Z E I S I	LAKEEFFECT
A T N J E R R T G B J A B Q N	BLIZZARD
Z Z E C K F F R N N P S V U S	SNOWSTORM
Z K I E C P F N I O L T Y A N	ICE
I P L O L Y L E Z O A E L L O	WINDY
L B U N I S U J E A N R L L W	SLEET
B N D Y P O R V E K H M V S F	FREEZINGRAIN
O C P M P U R D R H A Y F T L	FLURRIES
Q J Y V E U I A F A T L F I A	SNOWSQUALLS
W G N K R C E N Q W I N D Y K	SNOWFLAKE
N Z K M E V S J G W R G Q K E	

Solution

Spring, 2017

Severe Weather



From the Editor's Desk

We have a small assortment of very pertinent feature articles for this issue. Our opener is a 30th-anniversary recap of experiences as told by one of our forecasters during the October 4, 1987 snowstorm as it had taken place right here in the Capital Region. It's a very amusing read that will be sure to jog some memories, particularly amongst some of the older folk. Then we have a look back at what might perhaps be the most active and devastating (and still ongoing) Atlantic hurricane seasons on record, with some numbers. After that, a look at changes to winter weather criteria coming down the pike as we look forward to the colder weather.

In our departments, we have six months of Albany statistics and records to cover this past spring and summer, and the Word Find puzzle covers the cool season we are now getting into. A special thanks goes out to all those writers who were graciously able to find the time during this very busy mid-year period to work on their contributions to this issue.

Now, we head into fall, then winter, where the holidays are just ahead. We look forward to coming to you again in the spring. In the meantime, enjoy the reading!

WCM Words

Steve DiRienzo
Warning Coordination Meteorologist, NWS Albany

Am I ready for winter? That is the question everyone needs to ask themselves over the next few weeks. Winter can be beautiful, but it brings its share of hazards which can impact everyday life. By preparing now, you can be ready when severe winter weather threatens.

Winter weather events that can impact our daily routines include bitter cold, lake effect snow, nor'easters, blizzards, ice storms, ice jams, and flooding. The December 2008 ice storm, the October snowstorms of 1987 and 2011, the blizzard of March 2017 and the record flooding of April 2011 in the Adirondacks from heavy rain and snowmelt are examples of the crippling effects of winter weather. The National Weather Service urges everyone to be prepared for the upcoming winter season.

The cold weather and darkness of winter puts an added strain on your car, so we suggest that you get your vehicle in good mechanical condition now. Check your tires, brakes, batteries, windshield wipers, windshield fluid, and antifreeze. If your car is in good working order, there is less chance it will fail during harsh winter weather. If roads are snow covered or icy, slow down and drive carefully. Clear your car of snow and ice before you drive. Make sure all windows, headlights and tail lights are clear.

Ice storms and fall snowstorms can cause widespread power outages. If possible, have emergency heating equipment available to keep at least one room warm if power is lost. Keep an adequate supply of wood for fireplaces or wood stoves, or kerosene for space heaters. If your pipes freeze, thaw them with hot water or hot air from a hair dryer. Do not use a torch.

Warm weather in winter can bring rain and melting snow which can saturate the ground, or run off frozen ground, and swell the rivers. Another winter problem in this area is flooding caused by ice jams in the rivers. Since ice that covers the rivers is lighter than water, it will float. Under the pressure of rising water, ice will often break into huge slabs and then stop somewhere, piling into a jam. This jam will block the flow of water, causing upstream flooding.

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.