

May Conditions & Northeast DEWS Discussion

By: Samantha Borisoff, Climatologist
Northeast Regional Climate Center



Northeast Regional
Climate Center



May Temperatures - Cold

| Station | May 8-10, 2020 Lowest Temp (°F) | All-time Coldest May Temp (°F) | Rank (coldest) |
|-----------------------|---------------------------------|--------------------------------|----------------|
| Binghamton, NY | 24.0 | 24.0 | 1 |
| Harrisburg, PA | 30.0 | 30.0 | 1 |
| Kennedy Airport, NY | 34.0 | 34.0 | 1 |
| LaGuardia Airport, NY | 36.0 | 36.0 | 1 |
| Newark, NJ | 34.0 | 33.0 | 2 |
| Central Park, NY | 34.0 | 32.0 | 3 |
| Bridgeport, CT | 35.0 | 31.0 | 4 |
| Islip, NY | 34.0 | 32.0 | 4 |
| Scranton, PA | 29.0 | 27.0 | 4 |
| Williamsport, PA | 29.0 | 28.0 | 4 |
| Wilmington, DE | 33.0 | 30.0 | 4 |
| Pittsburgh, PA | 28.0 | 26.0 | 6 |
| Baltimore, MD | 34.0 | 32.0 | 7 |
| Buffalo, NY | 29.0 | 25.0 | 7 |
| Philadelphia, PA | 35.0 | 28.0 | 7 |
| Rochester, NY | 29.0 | 26.0 | 8 |
| Boston, MA | 34.0 | 31.0 | 9 |

| Station | May 8-10, 2020 Lowest Max Temp (°F) | All-time Coldest May Max Temp (°F) | Rank (coldest) |
|---------------------|-------------------------------------|------------------------------------|----------------|
| Binghamton, NY | 35.0 | 35.0 | 1 |
| Caribou, ME | 34.0 | 30.0 | 2 |
| Dulles Airport, VA | 50.0 | 47.0 | 2 |
| Harrisburg, PA | 46.0 | 43.0 | 2 |
| Syracuse, NY | 39.0 | 36.0 | 4 |
| Kennedy Airport, NY | 49.0 | 43.0 | 5 |
| Williamsport, PA | 46.0 | 44.0 | 5 |
| Islip, NY | 49.0 | 44.0 | 6 |
| Rochester, NY | 40.0 | 38.0 | 6 |
| Scranton, PA | 44.0 | 40.0 | 6 |
| Wilmington, DE | 49.0 | 44.0 | 6 |
| Worcester, MA | 40.0 | 37.0 | 6 |
| Concord, NH | 42.0 | 37.0 | 7 |
| Burlington, VT | 41.0 | 37.0 | 8 |
| Elkins, WV | 44.0 | 35.0 | 8 |
| Philadelphia, PA | 49.0 | 45.0 | 8 |
| Pittsburgh, PA | 43.0 | 40.0 | 8 |

Several sites had their coldest May temperature on record

High temperatures ranked among 10 coldest for May



May Temperatures - Cold

Minimum 1-Day Mean Min Temperature for Middletown-Harrisburg Area, PA (ThreadEx)

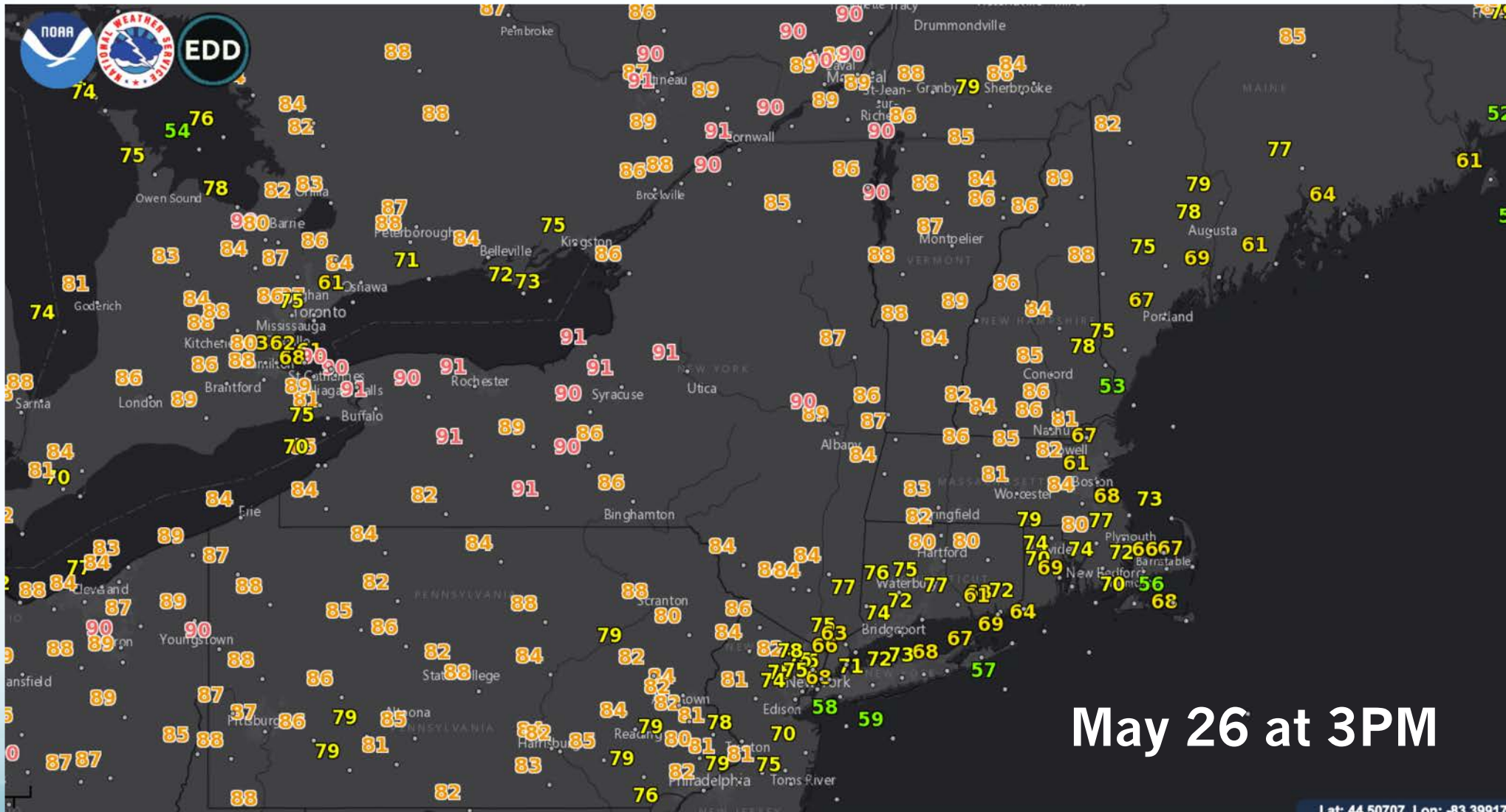
Click column heading to sort ascending, click again to sort descending.

| Rank | Value | Ending Date |
|---|-------|-------------|
| 1 | 30.0 | 2020-05-10 |
| 2 | 31.0 | 1966-05-11 |
| 3 | 32.0 | 1962-05-10 |
| - | 32.0 | 1947-05-09 |
| 5 | 33.0 | 2020-05-09 |
| 6 | 34.0 | 1996-05-14 |
| - | 34.0 | 1968-05-07 |
| - | 34.0 | 1966-05-10 |
| - | 34.0 | 1966-05-05 |
| - | 34.0 | 1956-05-17 |
| Last value also occurred in one or more previous years. | | |
| Period of record: 1888-07-01 to 2020-05-18 | | |

Low temperatures ranked among the 10 coldest for May
on several days at a few locations



May Temperatures - Hot



Among the 3 hottest May days on record

Among the 10 earliest 90°F days on record for Buffalo, Erie, & Ithaca

May Temperatures - Hot

Maximum 1-Day Mean Max Temperature for Avoca Area, PA (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

| Rank | Value | Ending Date |
|---|-------|-------------|
| 1 | 93.0 | 2020-05-26 |
| - | 93.0 | 2006-05-30 |
| - | 93.0 | 1962-05-18 |
| - | 93.0 | 1911-05-23 |
| - | 93.0 | 1911-05-22 |
| 6 | 92.0 | 2016-05-28 |
| - | 92.0 | 2010-05-26 |
| - | 92.0 | 1962-05-19 |
| - | 92.0 | 1934-05-21 |
| - | 92.0 | 1929-05-30 |
| Last value also occurred in one or more previous years. | | |
| Period of record: 1901-01-01 to 2020-05-26 | | |

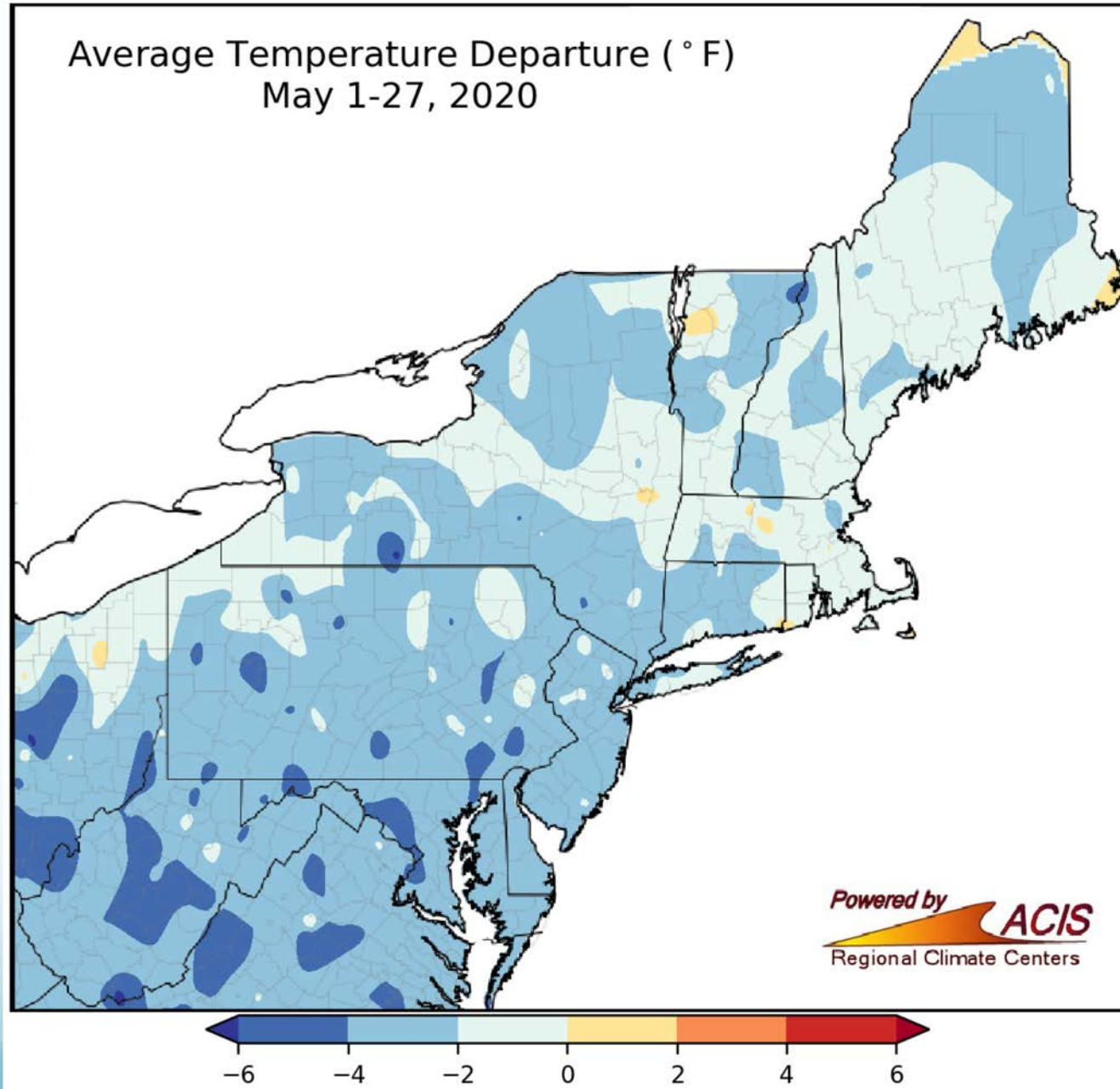
Scranton's hottest
May day on record

From winter to summer in just
over two weeks!

| Station | May 2020 Lowest Temp (°F) | May Rank (coldest) | May 2020 Highest Temp (°F) | May Rank (hottest) |
|----------------|---------------------------------|-----------------------|----------------------------------|-----------------------|
| Binghamton, NY | 24 (May 9) | 1 | 88 (May 26) | 3 |
| Scranton, PA | 29 (May 9) | 4 | 93 (May 26) | 1 |
| Rochester, NY | 27 (May 13) | 4 | 93 (May 26) | 3 |
| Buffalo, NY | 29 (May 9) | 7 | 93 (May 26) | 2 |



May Temperatures



From 6°F below normal to near normal



May Snowfall

Maximum 1-Day Total Snowfall for Elkins Area, WV (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

| Rank | Value | Ending Date |
|---|-------|-------------|
| 1 | 1.5 | 2020-05-08 |
| 2 | 1.0 | 1954-05-10 |
| 3 | 0.7 | 1963-05-01 |
| 4 | 0.5 | 1989-05-07 |
| - | 0.5 | 1923-05-10 |
| 6 | 0.1 | 1909-05-02 |
| 7 | T | 2020-05-09 |
| - | T | 2016-05-15 |
| - | T | 1996-05-12 |
| - | T | 1989-05-06 |
| Last value also occurred in one or more previous years. | | |
| Period of record: 1899-01-01 to 2020-05-10 | | |

Elkins - snowiest May day and snowiest May on record

Monthly Total Snowfall for Islip Area, NY (ThreadEx)

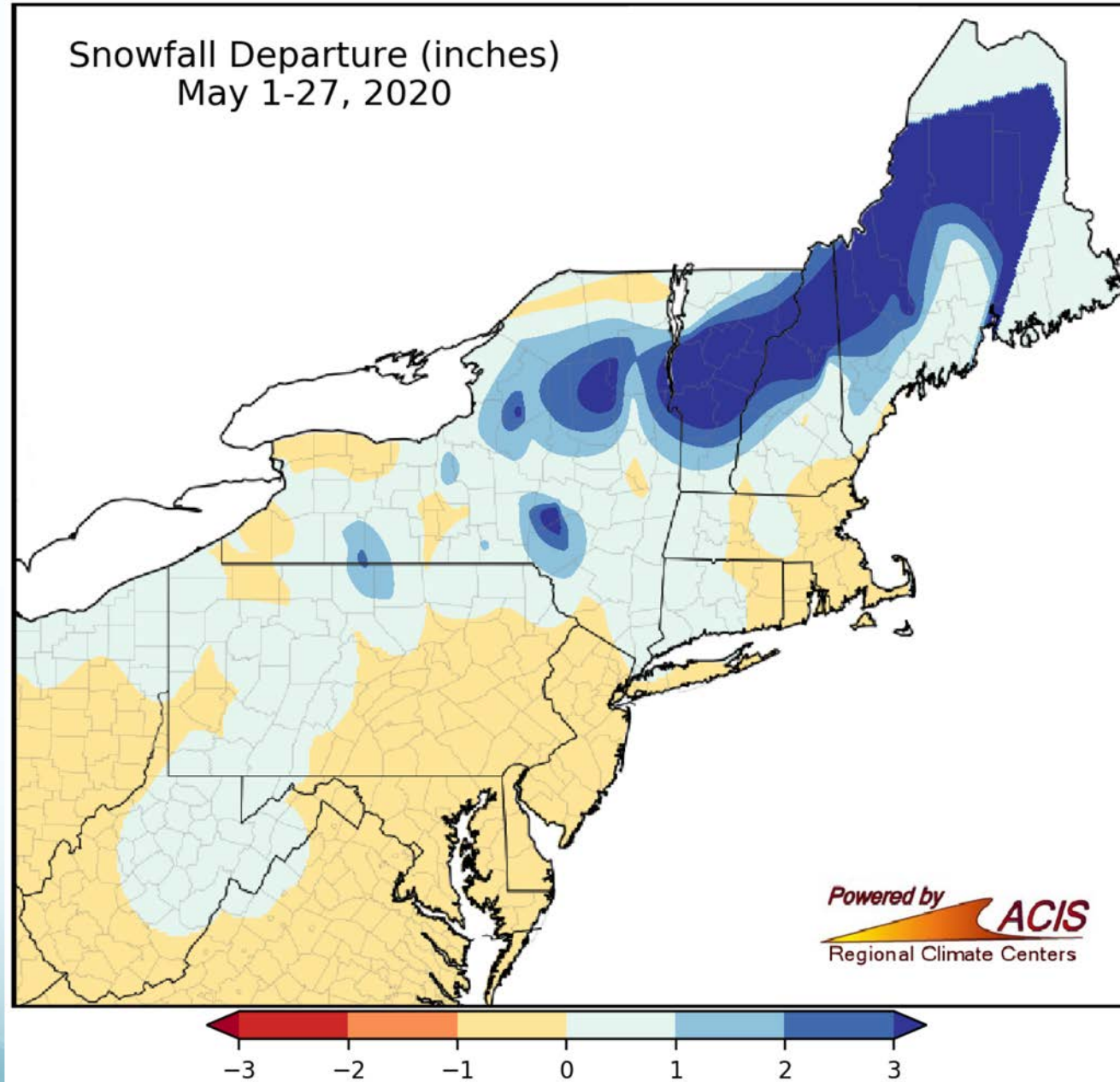
Click column heading to sort ascending, click again to sort descending.

| Year | Jan | Feb | Mar | Apr | May | Season |
|------|-----|-----|-----|-----|-----|--------|
| 2020 | 2.5 | 0.0 | T | T | T | 2.5 |

Islip – May was snowier than February; latest snowfall on record; tied as snowiest May

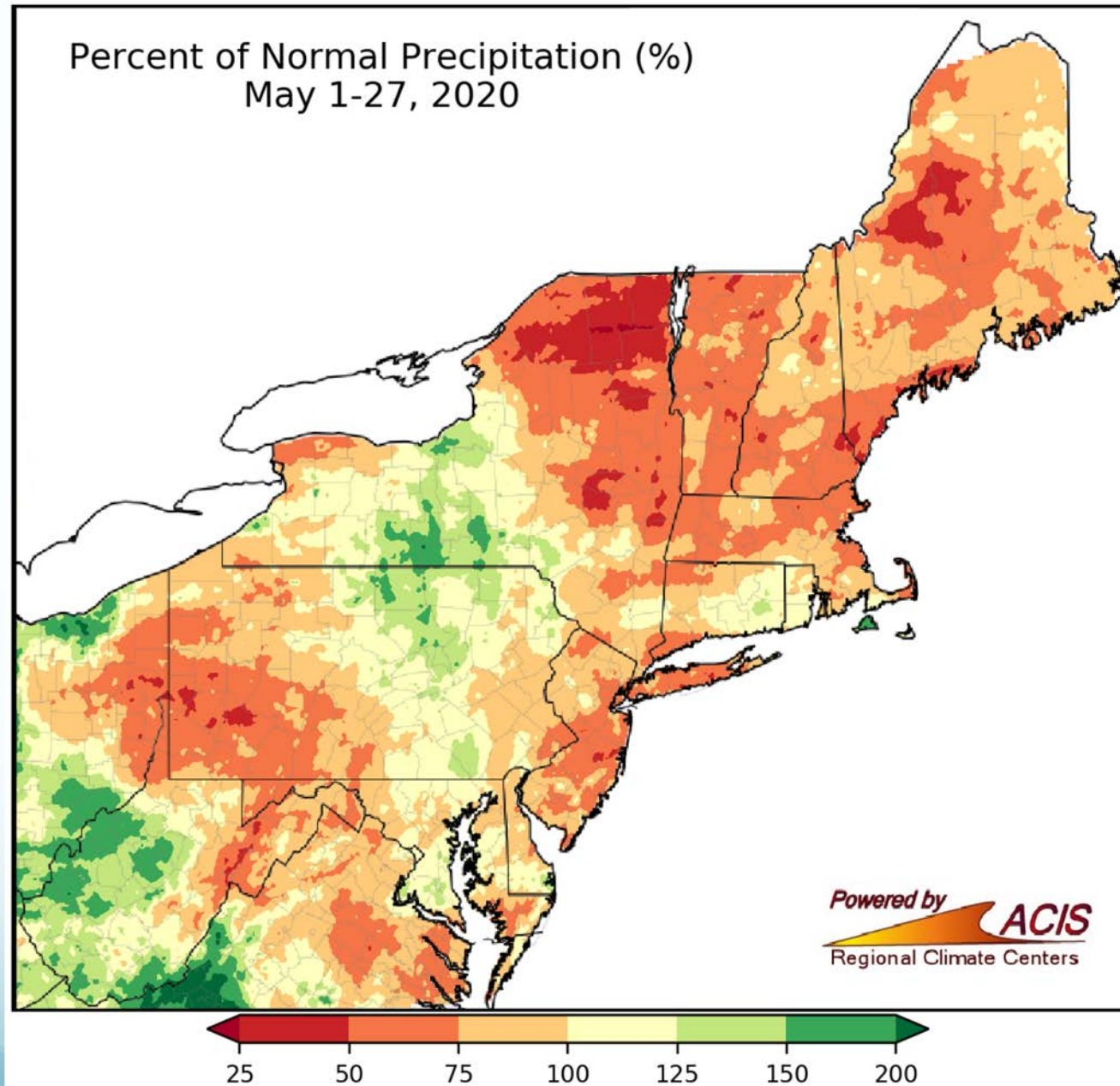


May Snowfall



From near normal to more than 3" above normal

May Precipitation



From 25% of normal to 200% of normal



May Precipitation

Maximum 1-Day Total Precipitation for Charleston Area, WV (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

| Rank | Value | Ending Date |
|------|-------|-------------|
| 1 | 2.38 | 1917-05-27 |
| 2 | 2.26 | 1994-05-07 |
| 3 | 2.14 | 2020-05-20 |
| 4 | 2.02 | 1982-05-29 |
| 5 | 1.99 | 1995-05-18 |
| 6 | 1.96 | 1941-05-31 |
| 7 | 1.95 | 2009-05-04 |
| - | 1.95 | 2008-05-08 |
| 9 | 1.92 | 2010-05-12 |
| 10 | 1.87 | 1908-05-30 |

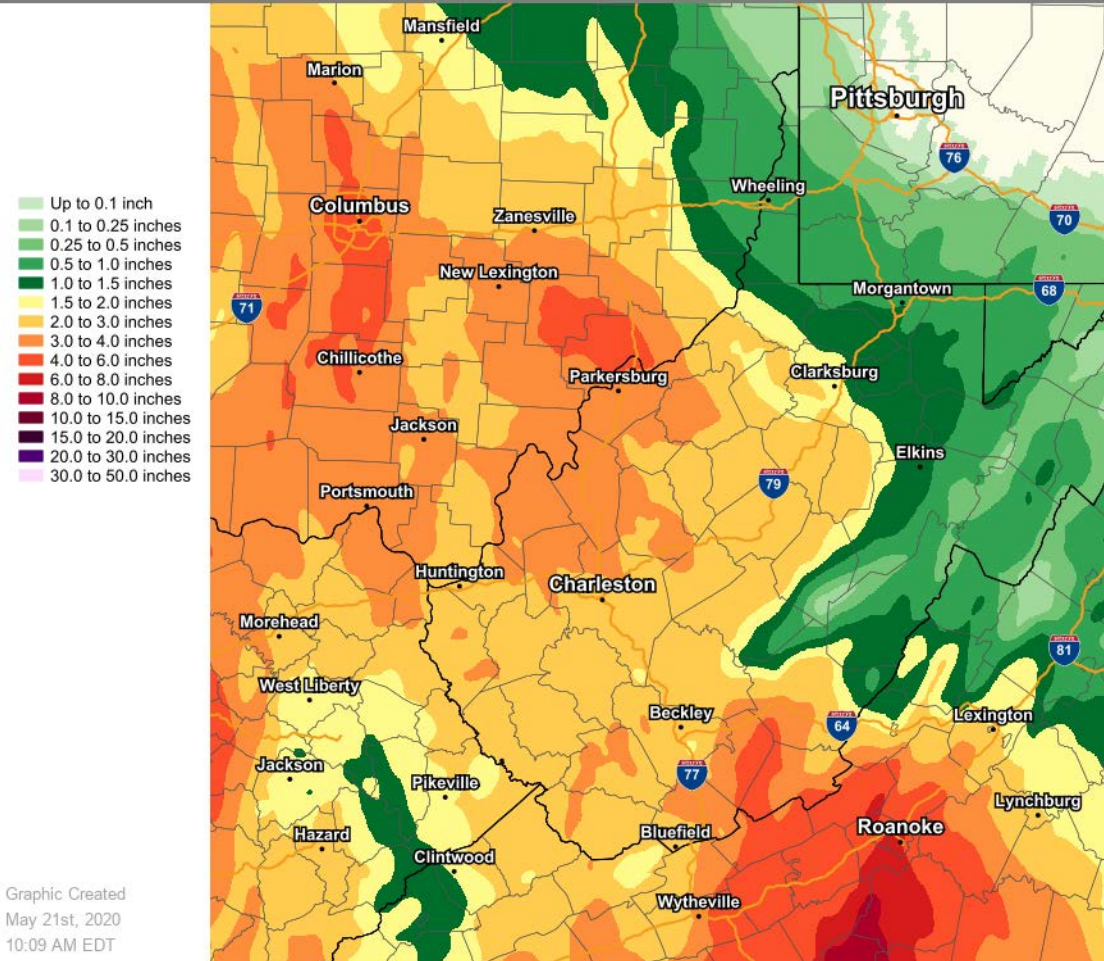
Period of record: 1892-04-02 to 2020-05-25

Charleston – 3rd wettest May day on record



Observed Precipitation

Valid Ending Thursday May 21st, 2020 at 10 AM EDT



Some areas saw flash flooding



Graphic Created
May 21st, 2020
10:09 AM EDT

May 15 Severe Weather



Credit: NWS Albany



Credit: Pepperell
Emergency
Management/David Querze

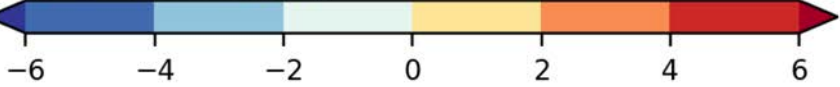
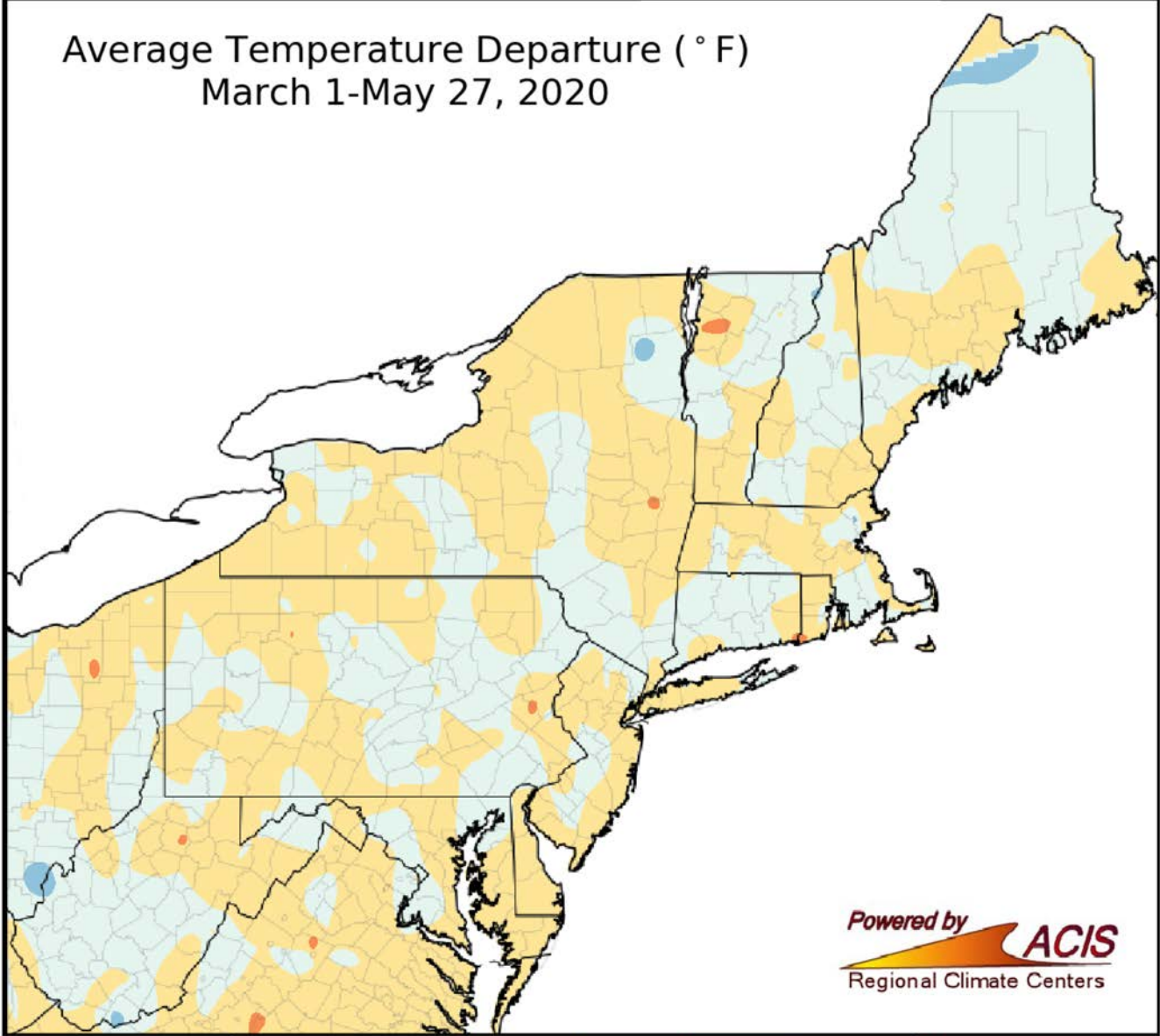
An EF-1 tornado and straight-line winds of up to 100 mph caused damage in New York and New England



Credit: Pepperell
Emergency
Management/David Querze

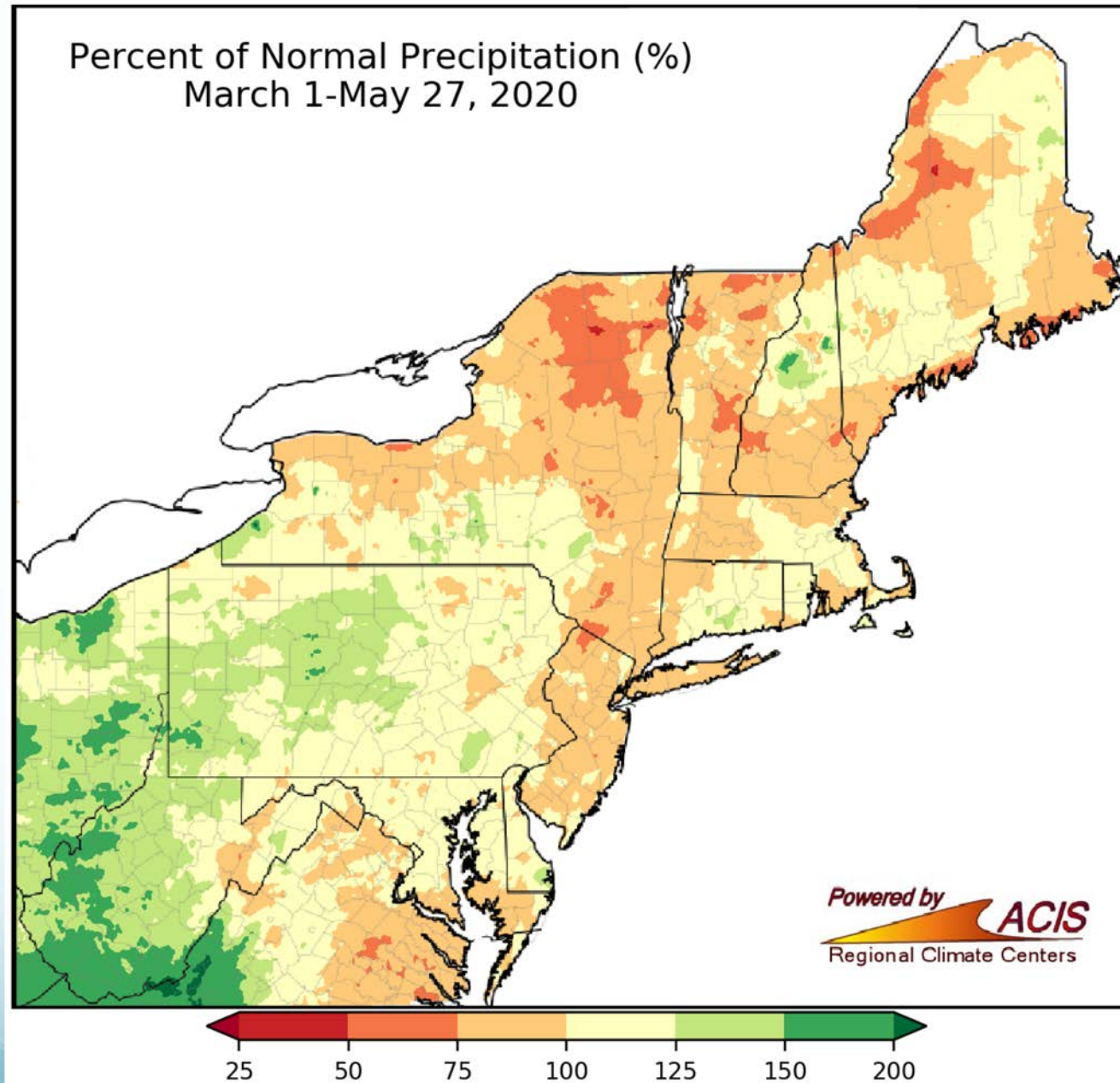
Spring Temperatures

Average Temperature Departure (°F)
March 1-May 27, 2020



Within 2°F of normal

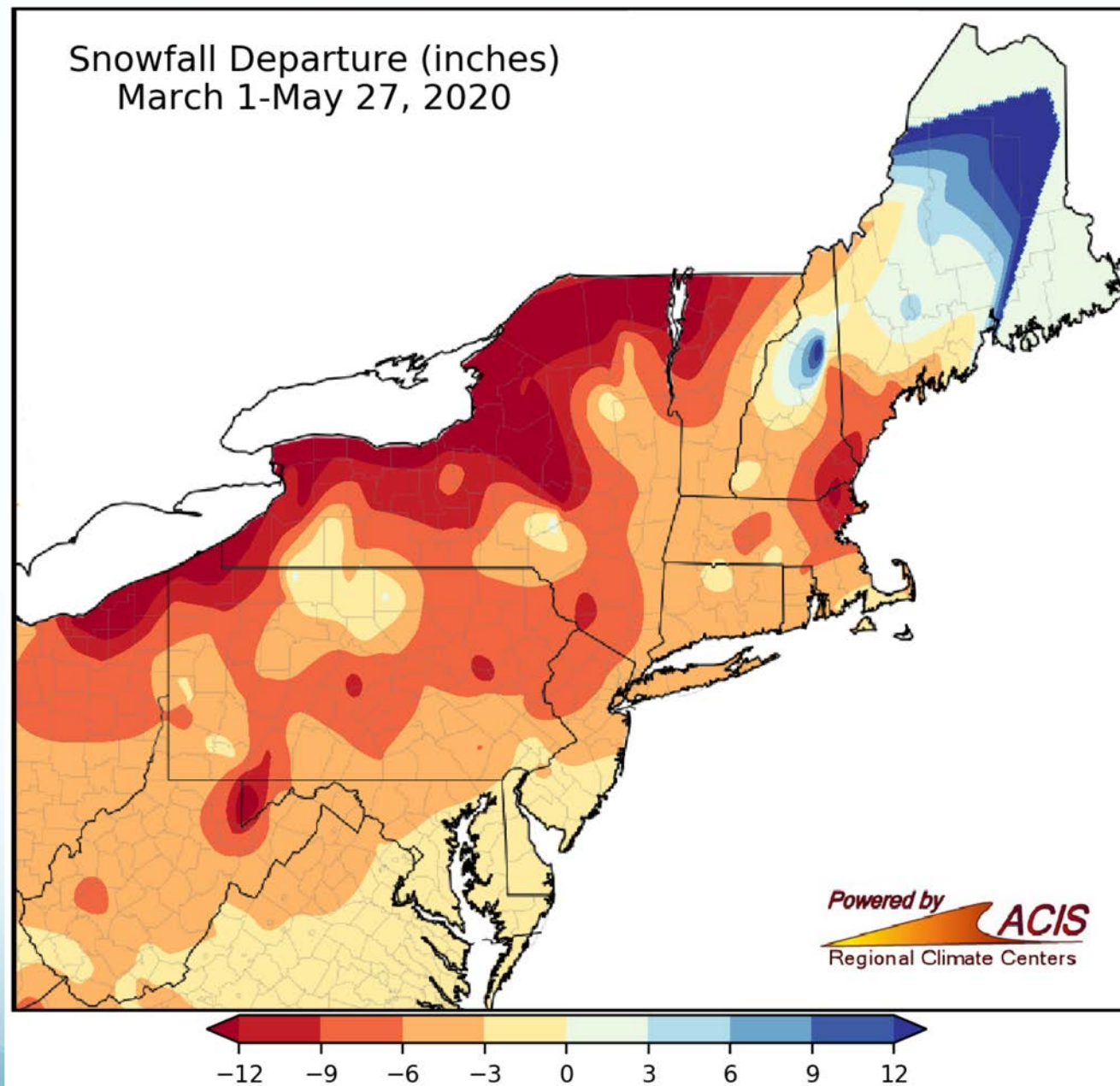
Spring Precipitation



From 50% of normal to 200% of normal

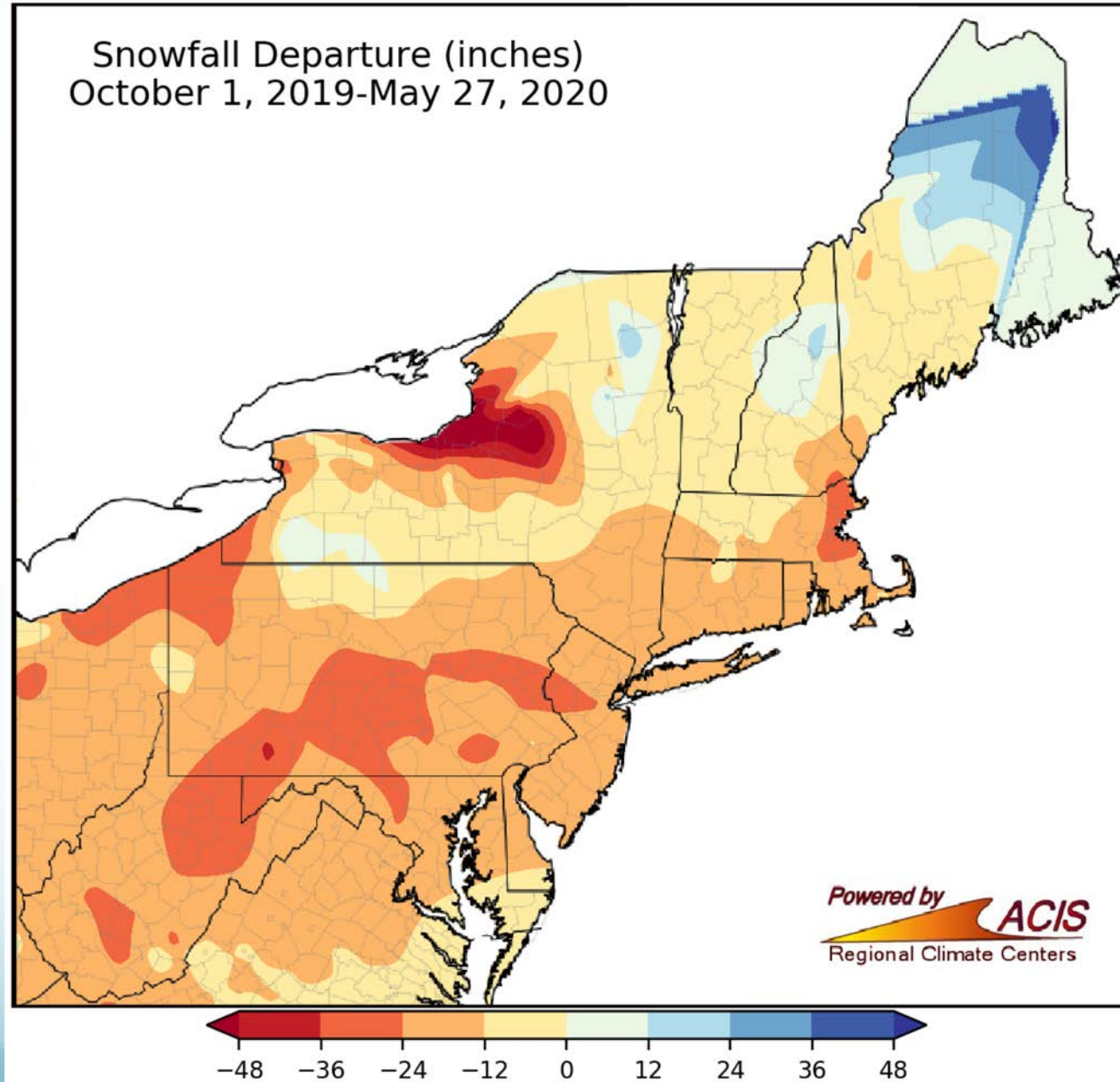


Spring Snowfall



From more than 12" below normal to more than 12" above normal

October-May Snowfall



From more than 48" below normal to 48" above normal

October-May Snowfall

Time Series Summary for Middletown-Harrisburg Area, PA (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

| Rank | Ending Date | Total Snowfall Oct 1 to May 31 | Missing Count |
|------|-------------|--------------------------------|---------------|
| 1 | 2020-05-31 | 5.1 | 4 |
| 2 | 1995-05-31 | 9.0 | 0 |
| 3 | 1938-05-31 | 9.5 | 0 |

Time Series Summary for Philadelphia Area, PA (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

| Rank | Ending Date | Total Snowfall Oct 1 to May 31 | Missing Count |
|------|-------------|--------------------------------|---------------|
| 1 | 1973-05-31 | T | 0 |
| 2 | 2020-05-31 | 0.3 | 4 |
| 3 | 1998-05-31 | 0.8 | 0 |
| 4 | 1950-05-31 | 2.0 | 0 |
| 5 | 2012-05-31 | 4.0 | 0 |
| - | 2002-05-31 | 4.0 | 0 |

Time Series Summary for Washington Area, DC (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

| Rank | Ending Date | Total Snowfall Oct 1 to May 31 | Missing Count |
|------|-------------|--------------------------------|---------------|
| 1 | 1998-05-31 | 0.1 | 0 |
| - | 1973-05-31 | 0.1 | 0 |
| 3 | 2020-05-31 | 0.6 | 6 |
| 4 | 2012-05-31 | 2.0 | 0 |
| 5 | 1976-05-31 | 2.2 | 0 |



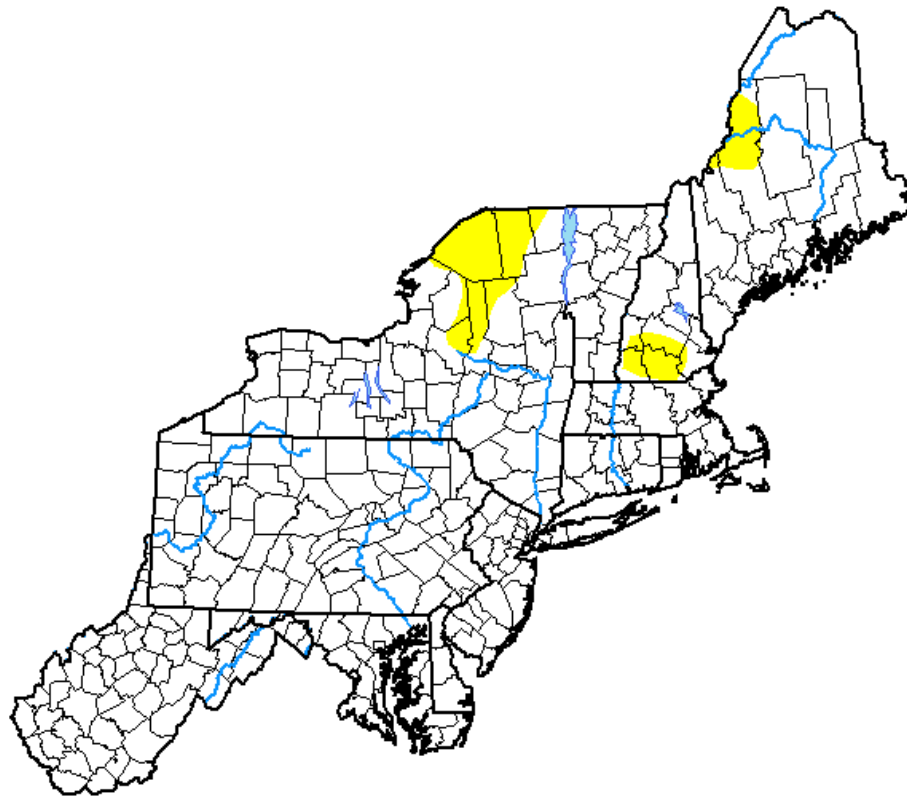
Drought Monitor

U.S. Drought Monitor Northeast

May 26, 2020
(Released Thursday, May 28, 2020)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|--|--------|-------|-------|-------|-------|------|
| Current | 94.65 | 5.35 | 0.00 | 0.00 | 0.00 | 0.00 |
| Last Week <i>05-19-2020</i> | 96.65 | 3.35 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 Months Ago <i>02-25-2020</i> | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start of Calendar Year <i>12-31-2019</i> | 99.61 | 0.39 | 0.00 | 0.00 | 0.00 | 0.00 |
| Start of Water Year <i>10-01-2019</i> | 48.74 | 51.26 | 8.49 | 2.23 | 0.00 | 0.00 |
| One Year Ago <i>05-28-2019</i> | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

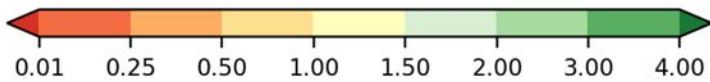
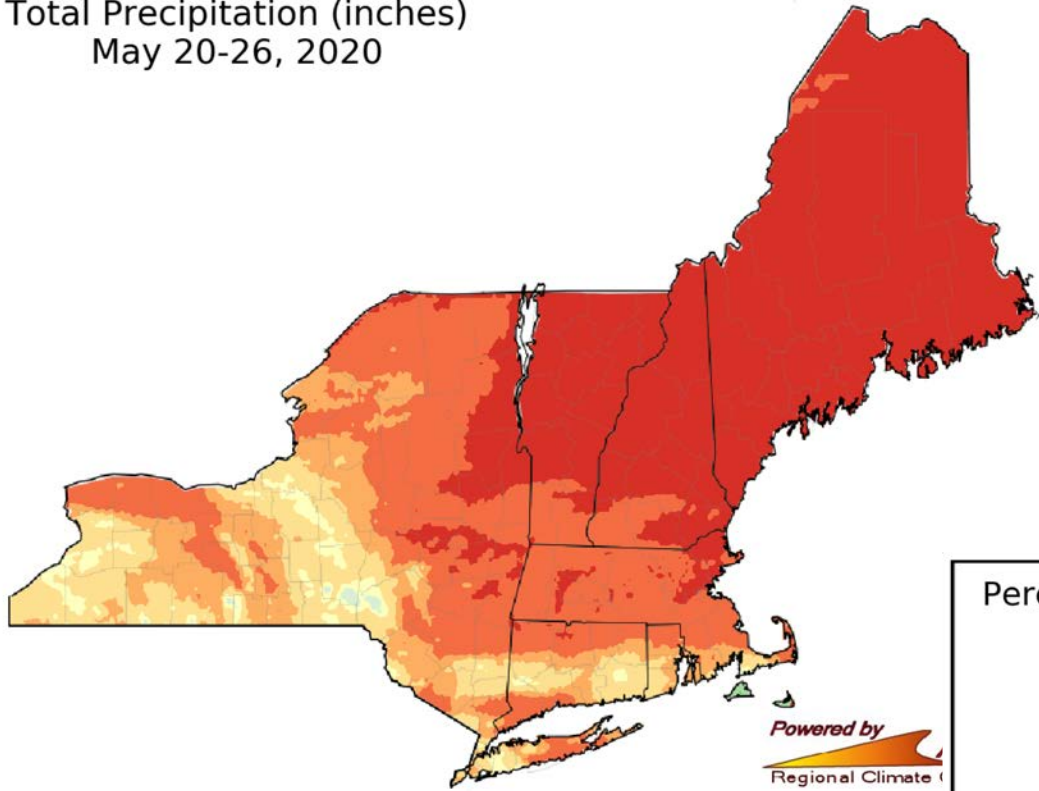
Author:

Curtis Riganti
National Drought Mitigation Center

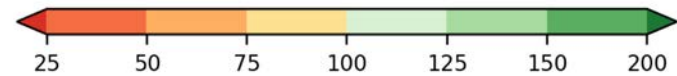
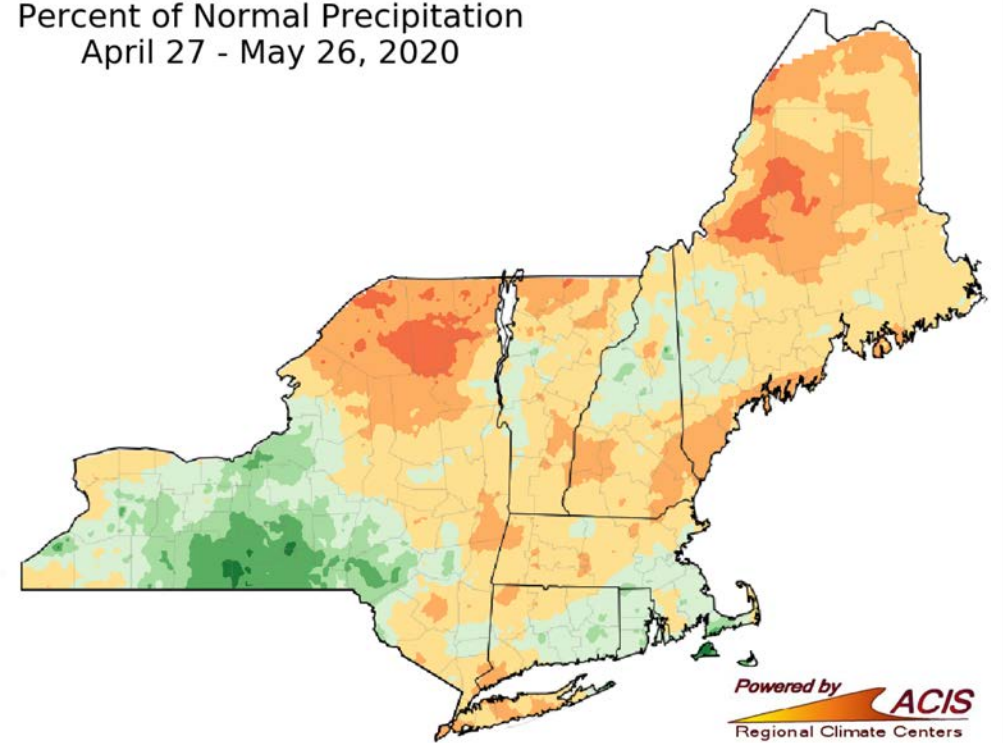


droughtmonitor.unl.edu

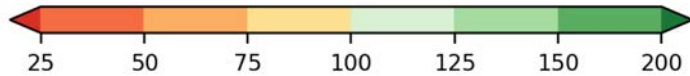
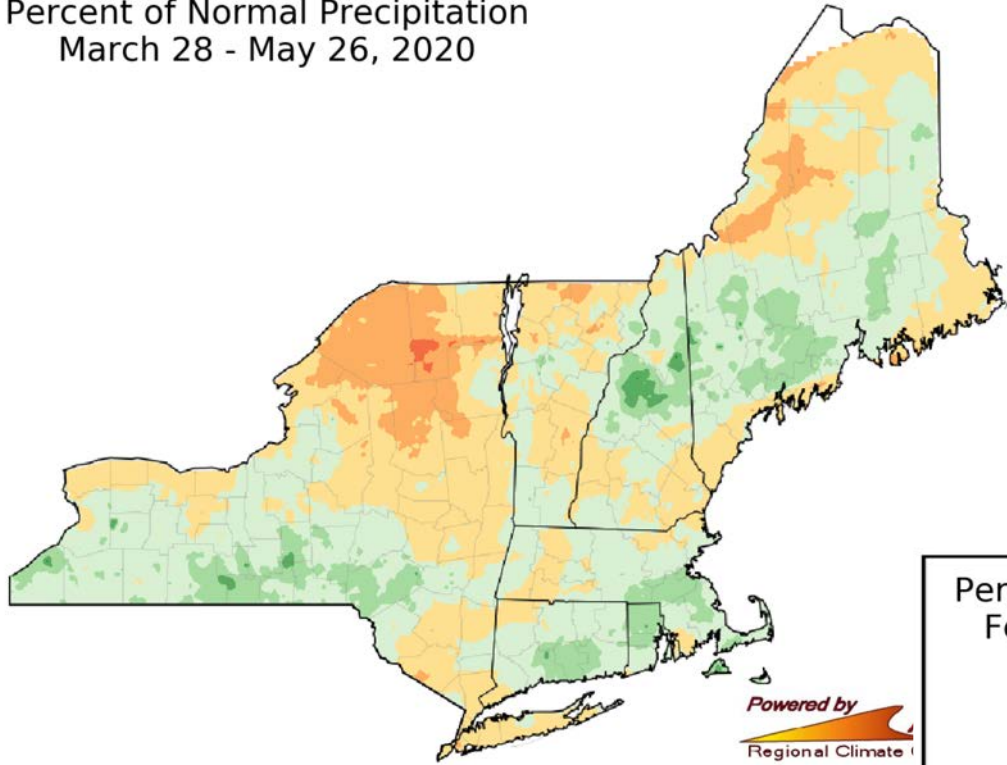
Total Precipitation (inches)
May 20-26, 2020



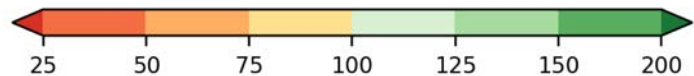
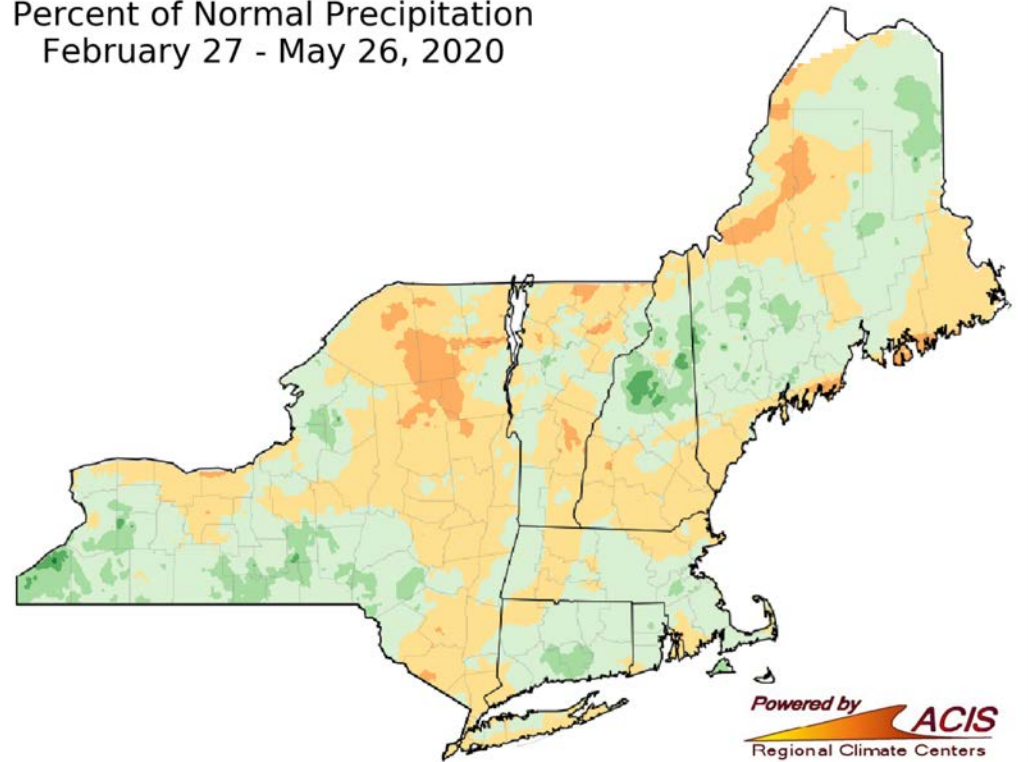
Percent of Normal Precipitation
April 27 - May 26, 2020

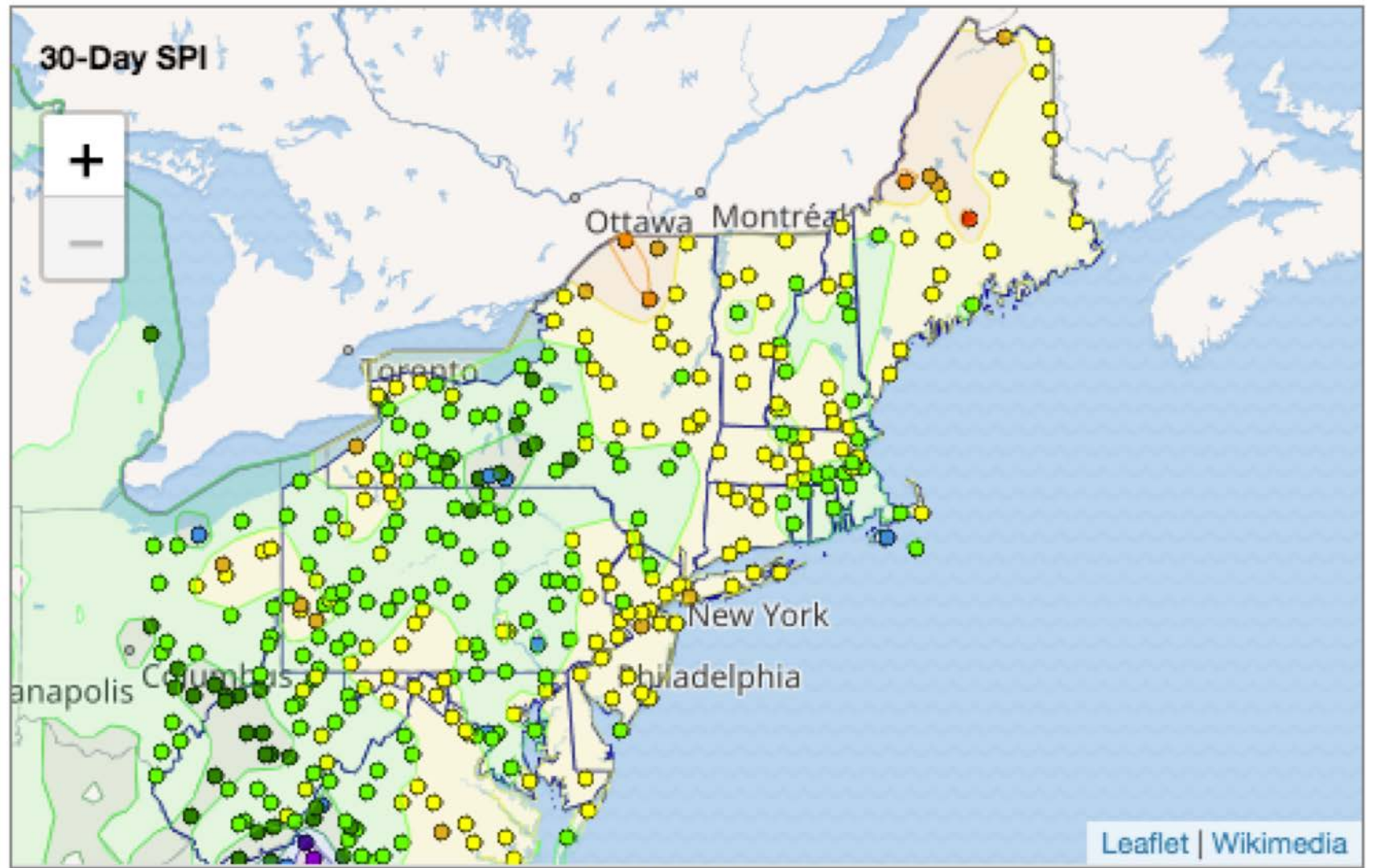


Percent of Normal Precipitation
March 28 - May 26, 2020



Percent of Normal Precipitation
February 27 - May 26, 2020



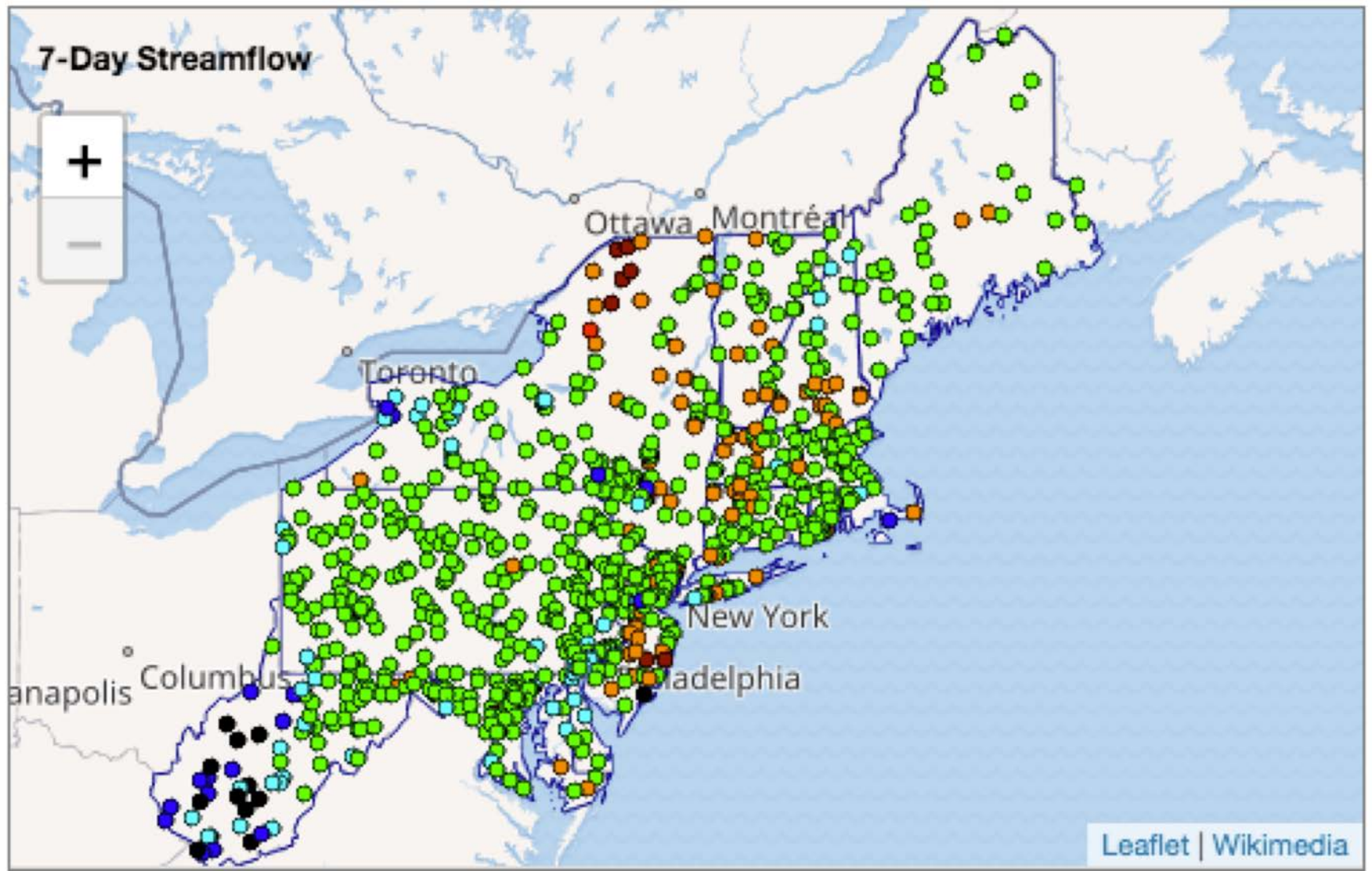


Explanation - SPI Levels

| | | | | | | | | | | | |
|-------|--------------|--------------|--------------|--------------|-------------|------------|------------|------------|------------|------------|------|
| ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <-3.0 | -3.0 to -2.5 | -2.5 to -2.0 | -2.0 to -1.5 | -1.5 to -1.0 | -1.0 to 0.0 | 0.0 to 1.0 | 1.0 to 1.5 | 1.5 to 2.0 | 2.0 to 2.5 | 2.5 to 3.0 | >3.0 |

Data provided by [High Plains Regional Climate Center](#).



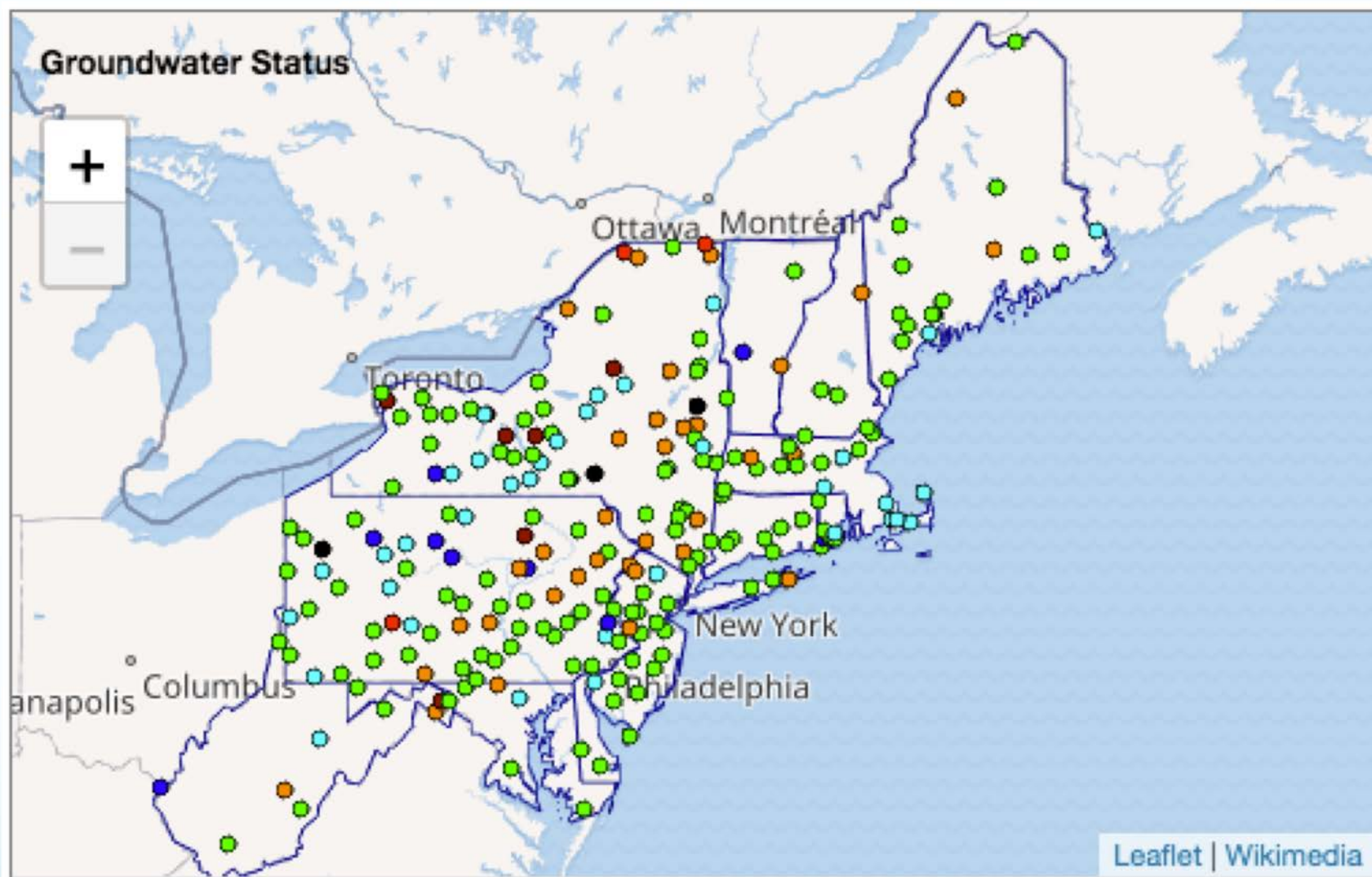


Explanation - Percentile Classes

| Low | Much below normal | Below normal | Normal | Above normal | Much above normal | High | |
|-----|-------------------|--------------|--------|--------------|-------------------|------|--|
| | <10% | 10-24% | 25-75% | 76-90% | >90% | | |

Data provided by [USGS WaterWatch - Streamflow](#).





Explanation - Percentile Classes

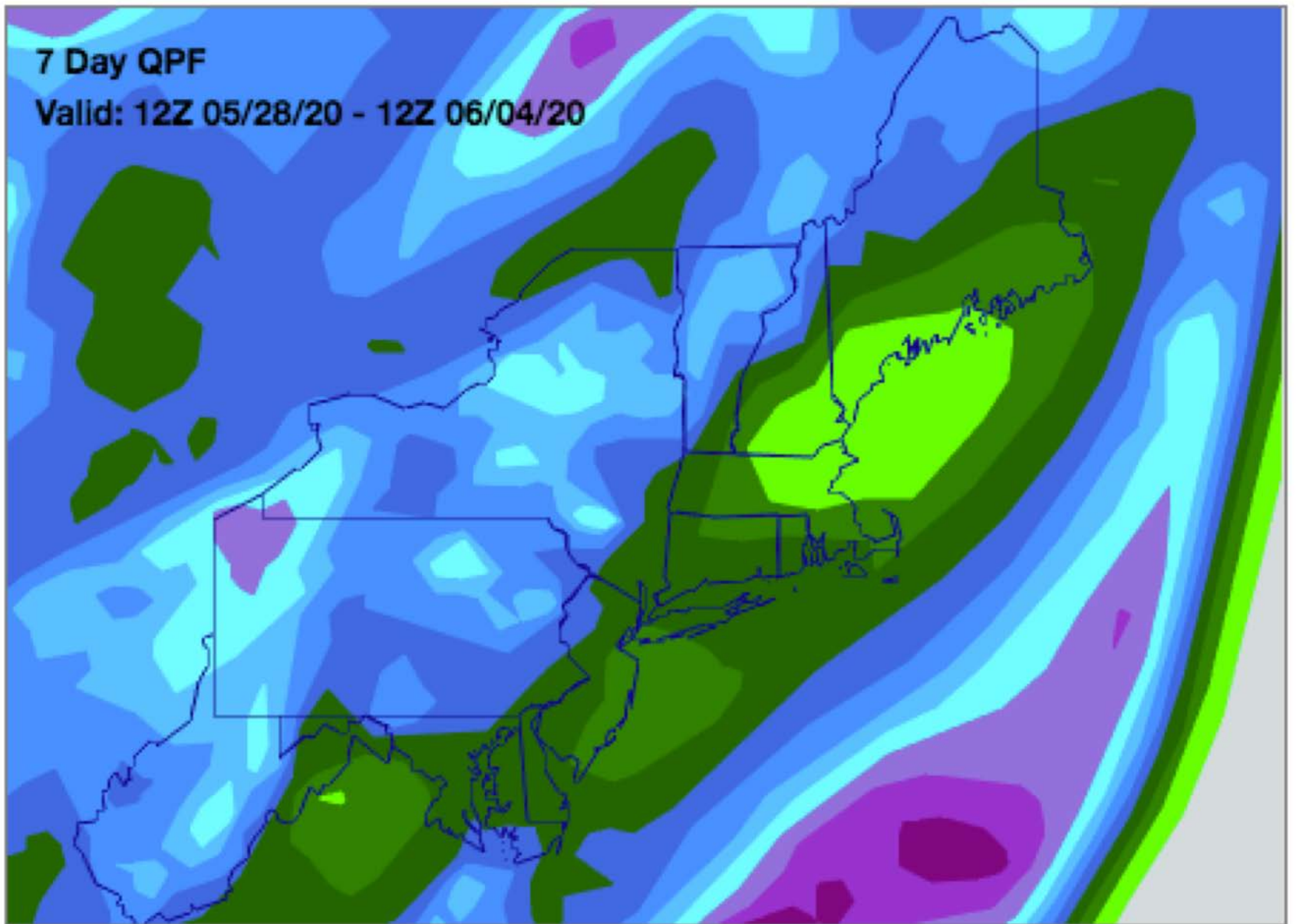
| | | | | | | | |
|-----|-------------------|--------------|--------|--------------|-------------------|------|--|
| | | | | | | | |
| Low | Much below normal | Below normal | Normal | Above normal | Much above normal | High | |
| | <10% | 10-24% | 25-75% | 76-90% | >90% | | |

Data provided by [USGS Groundwater Watch](#) - [Climate Response Network](#).



7 Day QPF

Valid: 12Z 05/28/20 - 12Z 06/04/20



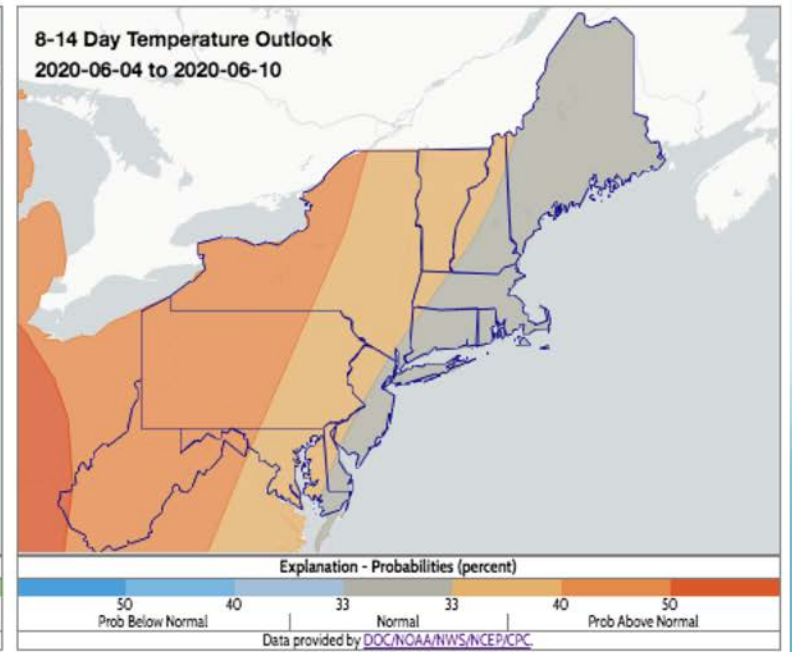
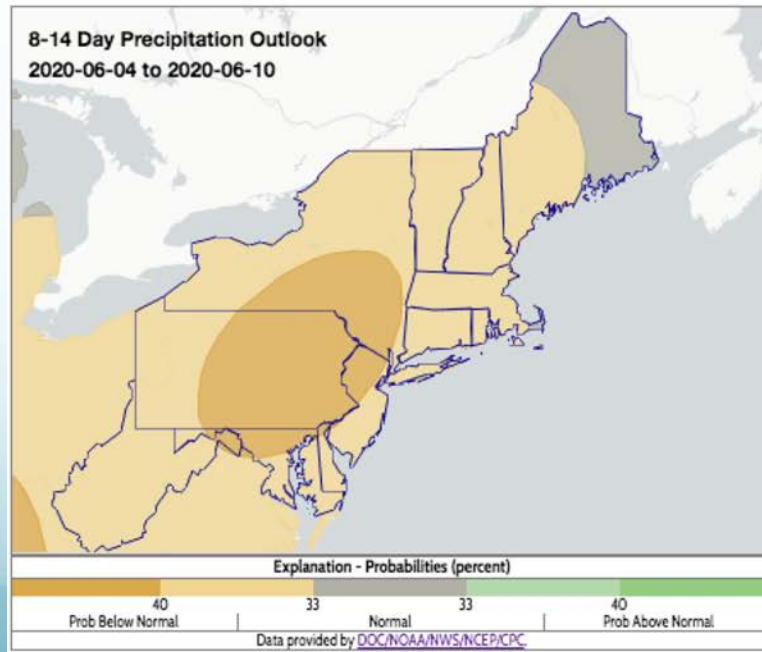
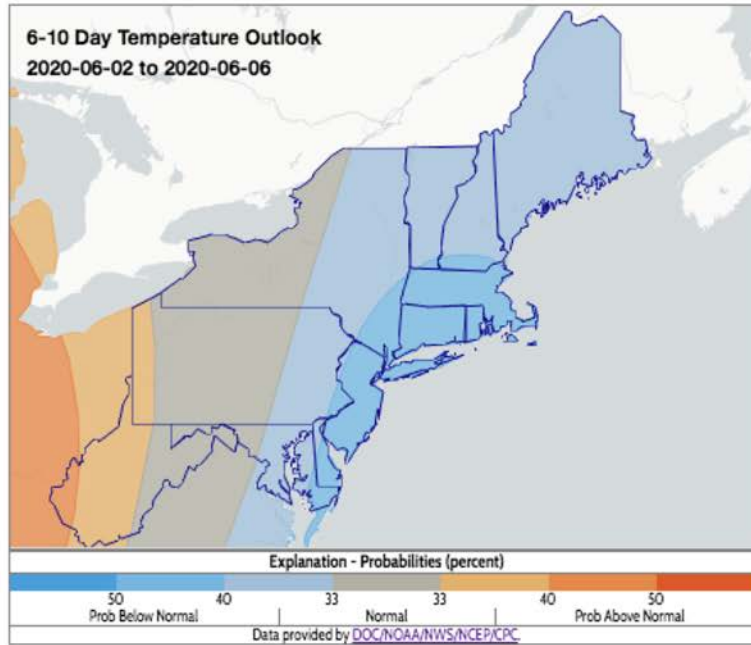
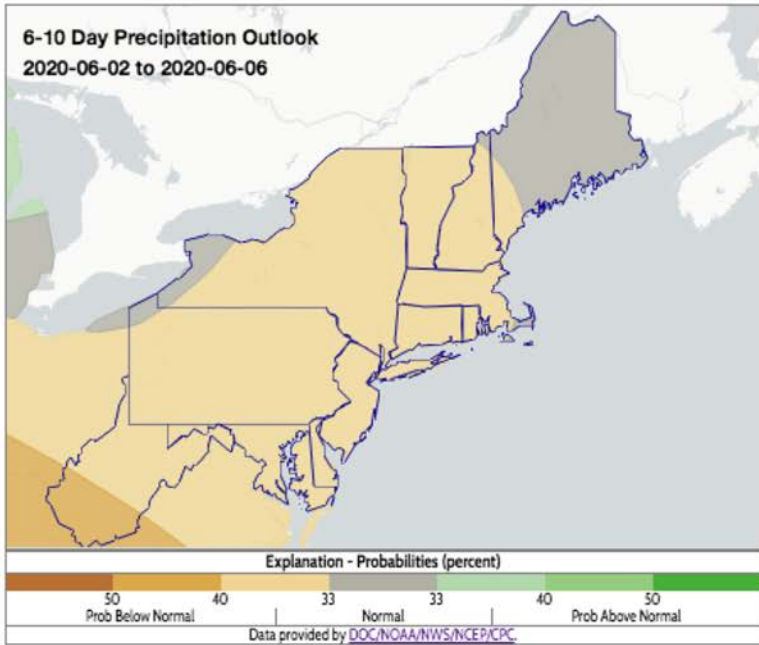
Explanation - Forecast precipitation (inches)

0.01 0.10 0.25 0.50 0.75 1.00 1.25 1.50 1.75 2.00

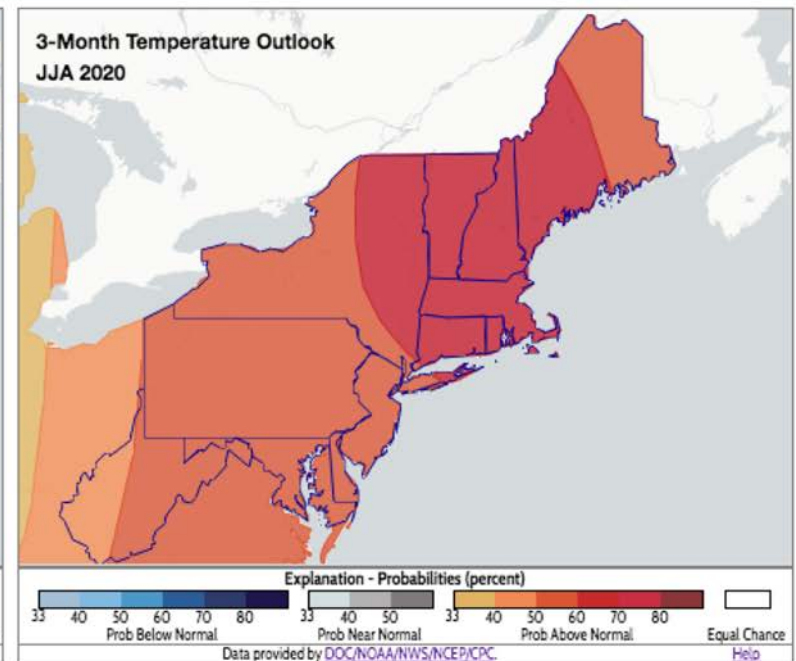
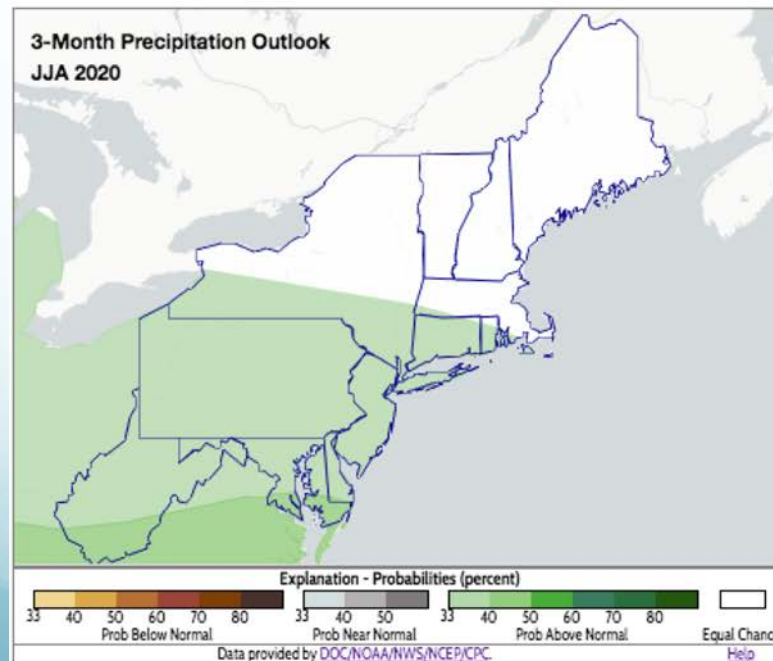
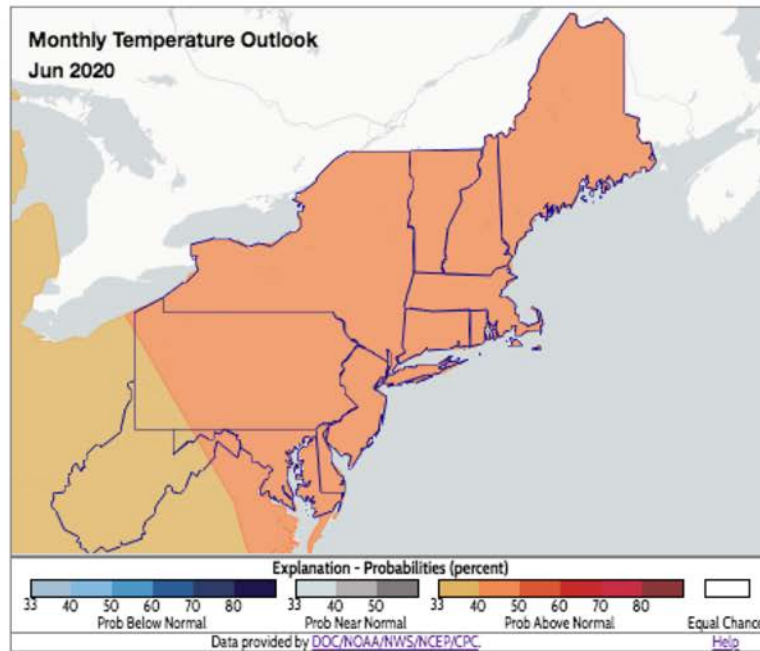
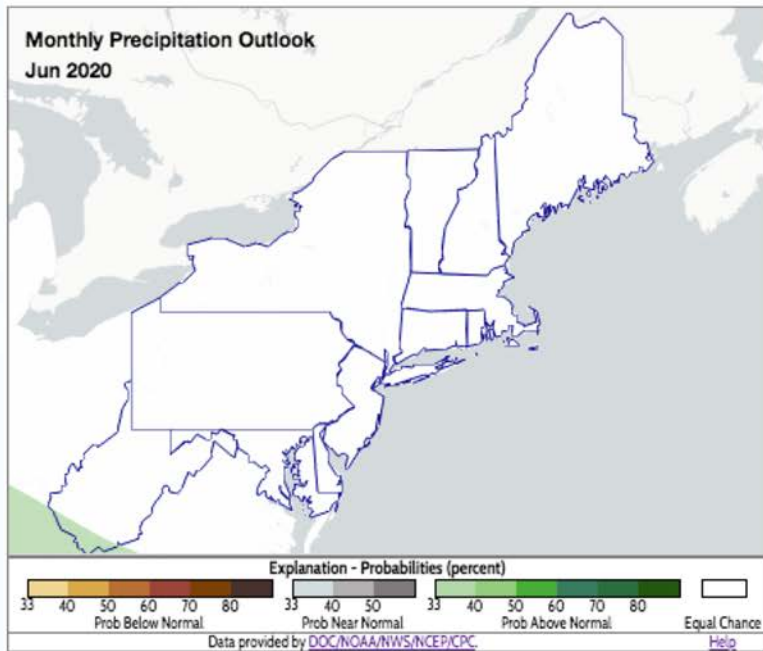
Data provided by [DOC/NOAA/NWS/NCEP/WPC](https://www.noaa.gov/doc/noaa/nws/ncep/wpc).



Short-term Outlooks



Monthly & 3-Month Outlooks



Contact Information

- nrcc@cornell.edu
- 607-255-1751

Upcoming Webinars

- Tuesday, June 30 at 9:30am
 - Heat Season
- Thursday, July 30 at 9:30am
 - EDDI (Evaporative Demand Drought Index)
- Thursday, August 27 at 9:30am
 - Hurricane Outlook & Season Update



www.nrcc.cornell.edu