

May Conditions & Northeast DEWS Discussion

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Northeast Regional Climate Center

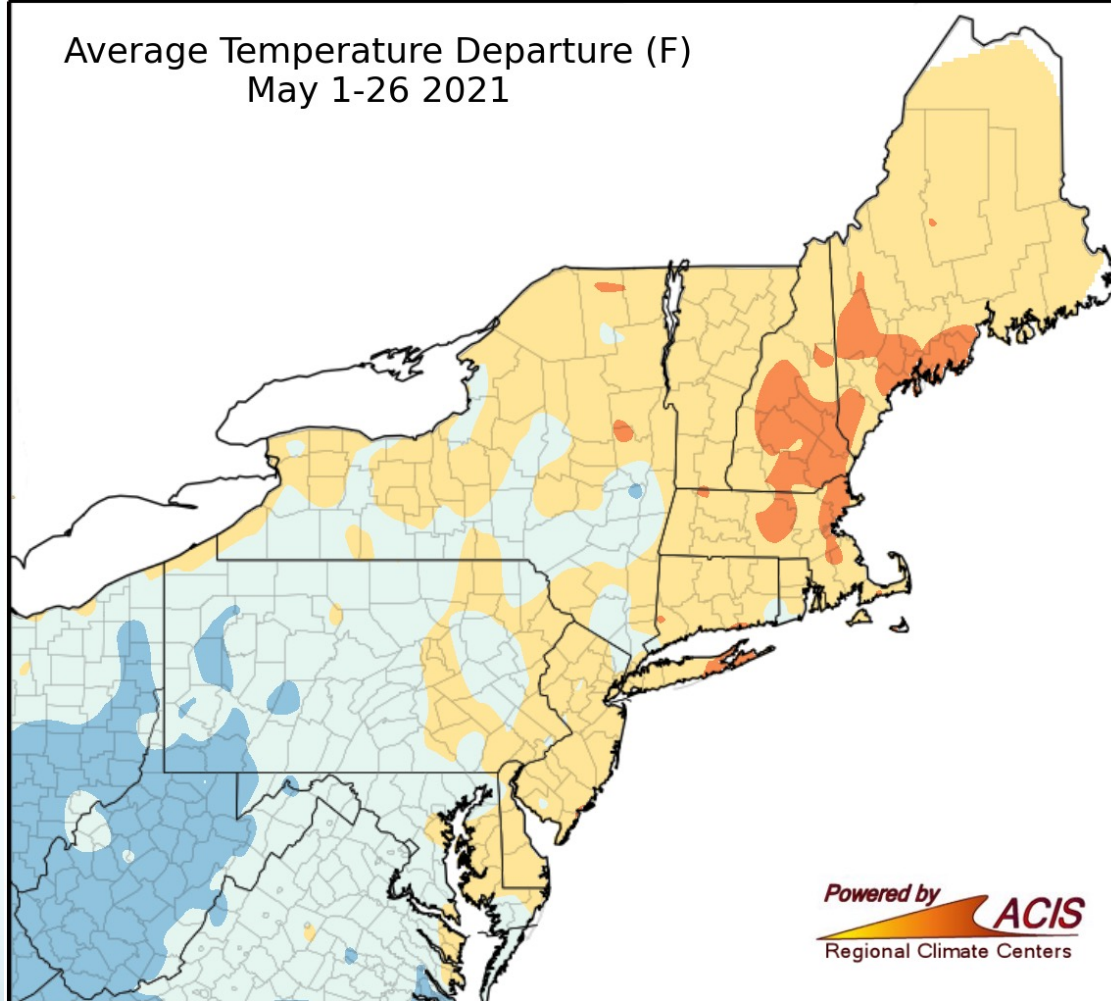


Northeast Regional
Climate Center



May Temperatures

Average Temperature Departure (F)
May 1-26 2021



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Regional Climate Centers



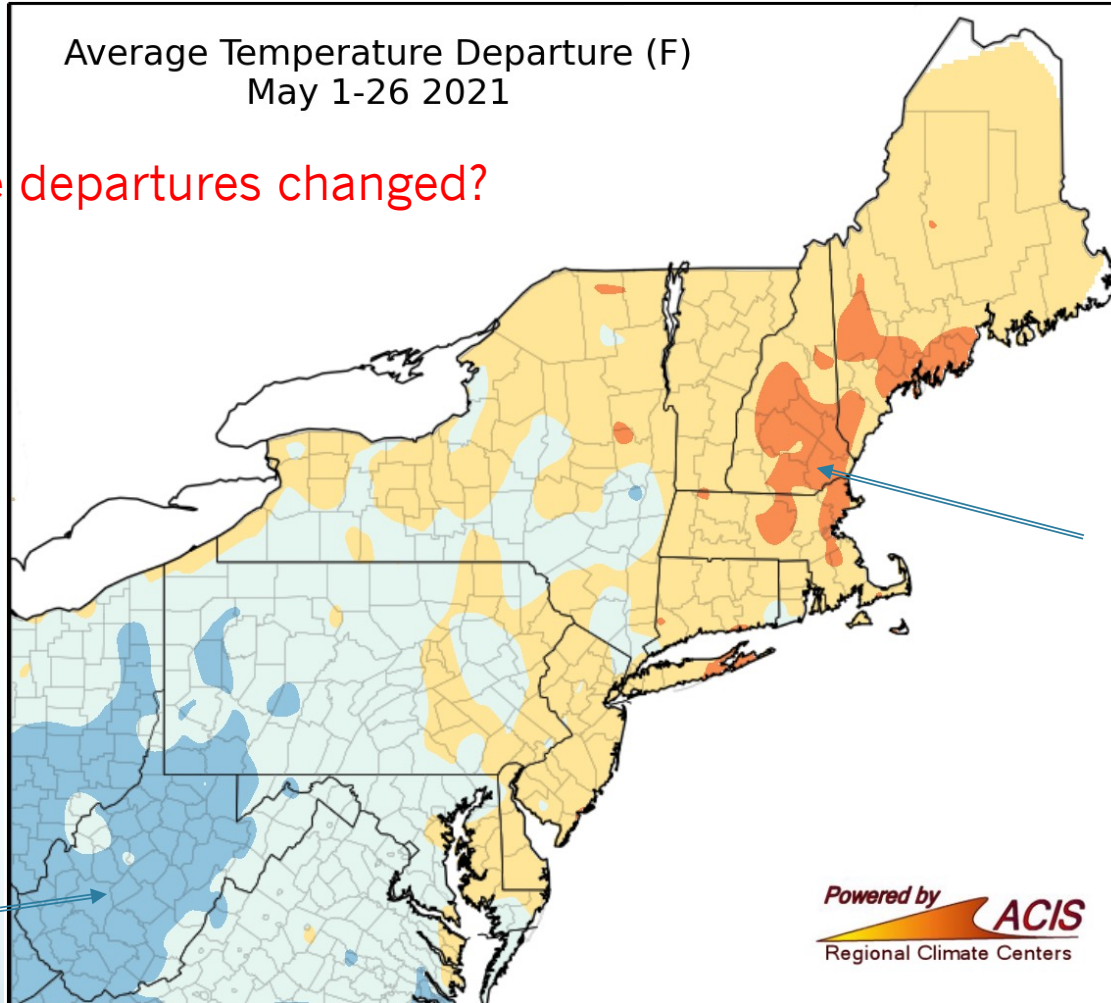
From 4°F below normal to 4°F above normal



May Temperatures

Average Temperature Departure (F)
May 1-26 2021

How have departures changed?



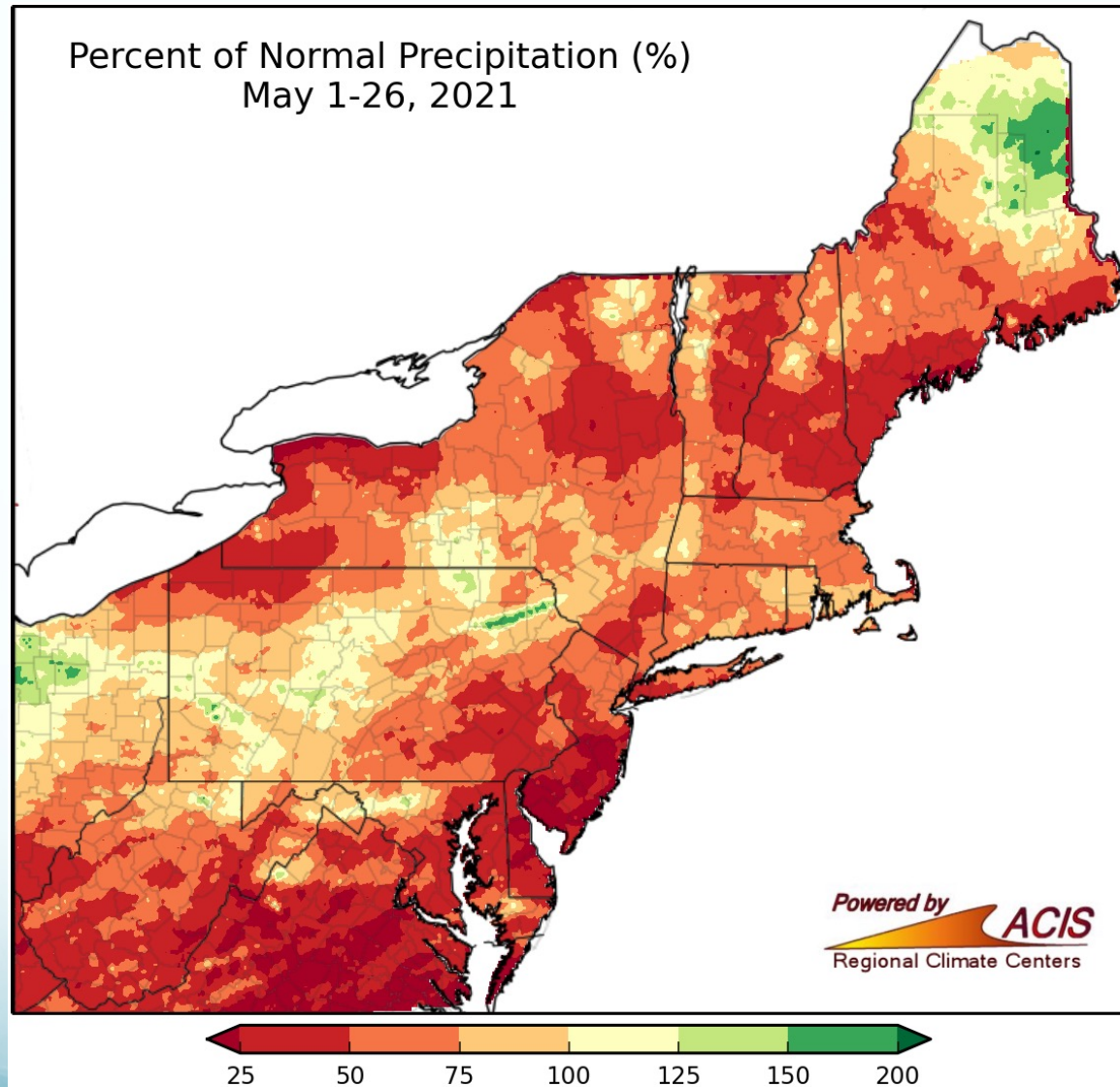
Charleston
1981-2010: 63.1
1991-2020: 64.1
2021: 61.2

Concord
1981-2010: 55.0
1991-2020: 56.0
2021: 57.7



From 4°F below normal to 4°F above normal

May Precipitation



From less than 25% of normal to more than 150% of normal



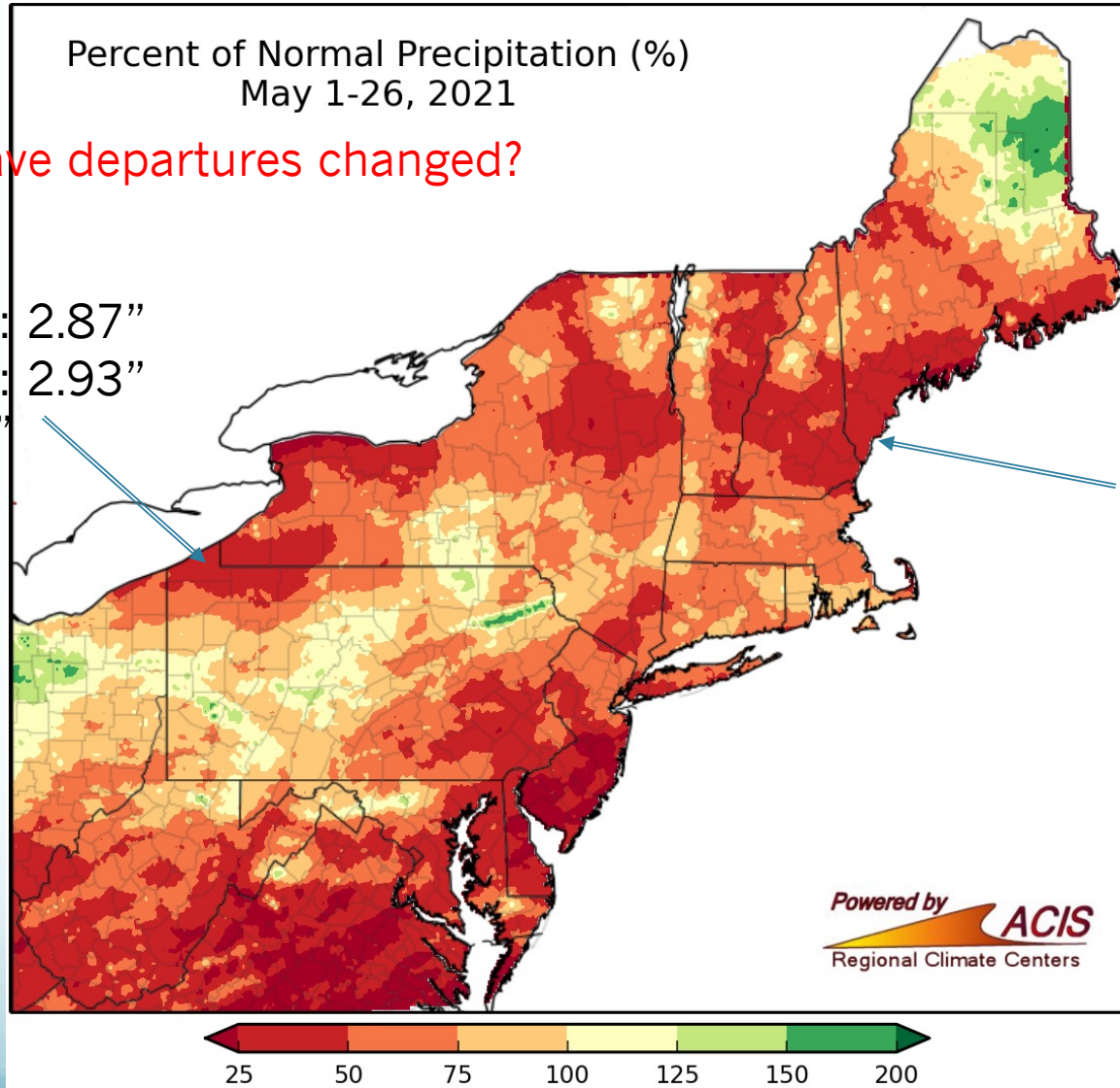
May Precipitation

Percent of Normal Precipitation (%)
May 1-26, 2021

How have departures changed?

Erie
1981-2010: 2.87"
1991-2020: 2.93"
2021: 0.86"

Portland
1981-2010: 3.37"
1991-2020: 3.06"
2021: 0.60"



From less than 25% of normal to more than 150% of normal



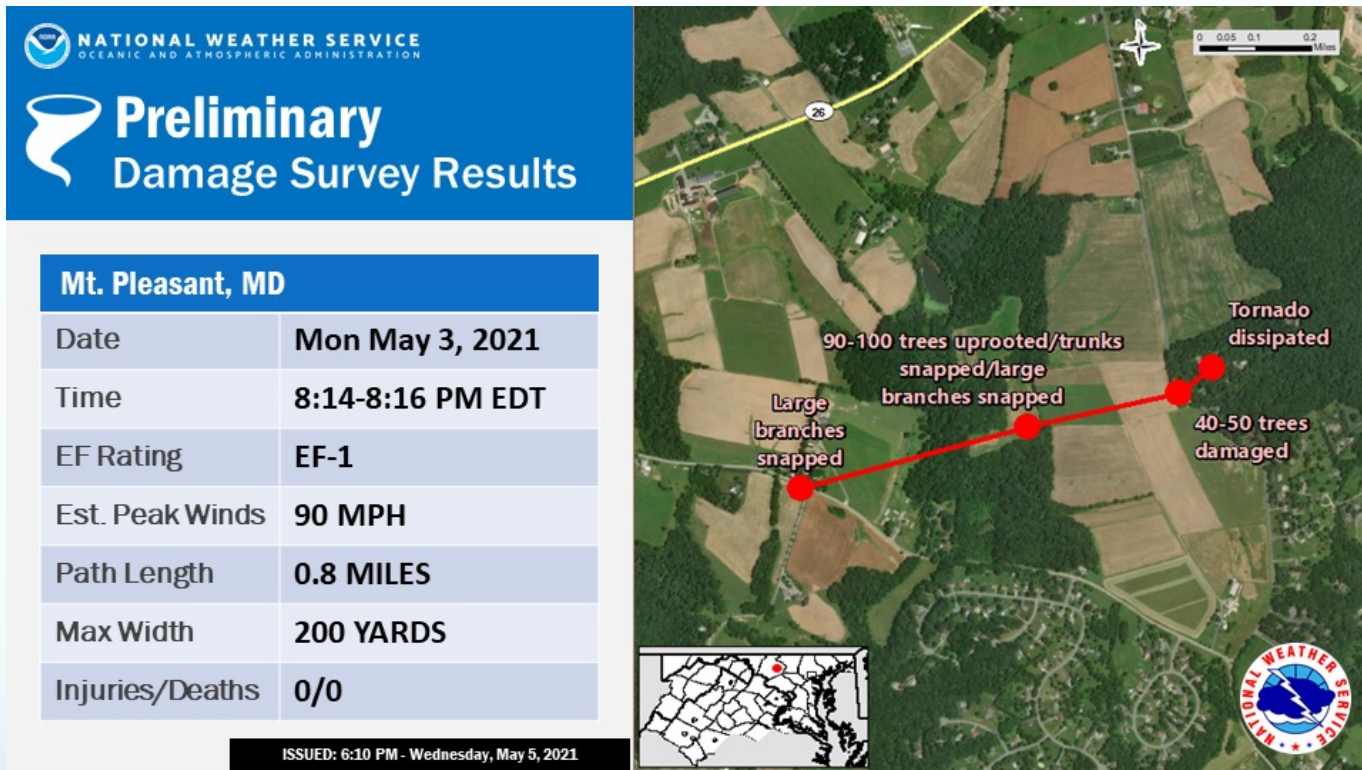
Use of New Normals

Weekly HDD Summary for New York

New York State Heating Degree Day Information: Forecast, Weekly, and Cumulative

| City | 05-21 through 05-26 | | | Week Ending 05-19 | | | 10-01 through 05-19 | | |
|-------------|---------------------|------|--------|-------------------|------|--------|---------------------|------|--------|
| | 2021 Forecast | 2020 | Normal | 2021 | 2020 | Normal | 2021 | 2020 | Normal |
| Albany | 7 | 4 | 29 | 45 | 43 | 44 | 6361 | 5721 | 6138 |
| Binghamton | 6 | 14 | 46 | 45 | 65 | 66 | 6368 | 6586 | 6749 |
| Buffalo | 2 | 0 | 37 | 39 | 61 | 56 | 5620 | 5918 | 6210 |
| Glens Falls | 6 | 18 | 43 | 53 | 74 | 62 | 6667 | 6874 | 7012 |
| Massena | 14 | 13 | 45 | 31 | 98 | 66 | M | M | 7565 |
| NYC | 2 | 17 | 14 | 2 | 29 | 23 | 3931 | 4164 | 4320 |
| Rochester | 7 | 7 | 34 | 36 | 74 | 51 | 5817 | 6137 | 6031 |
| Syracuse | 4 | 4 | 35 | 28 | 60 | 53 | 5672 | 6037 | 6321 |
| Watertown | 14 | 15 | 50 | 60 | 90 | 72 | M | 6873 | 7077 |

May 3-4 Severe Weather



- Six tornadoes touched down in the region, damaging buildings and snapping/uprooting at least 150 trees
- As much as 5 inches of rain caused flash flooding in northeastern Pennsylvania.



Late May Heat

Daily Records Broken for Max Temps

May 20

Buffalo 90
Syracuse 92
Erie 88
Burlington 92

May 22

Bridgeport 88
Dulles 89
Atlantic City 94
JFK 94

May 23

Bridgeport 90
Dulles 92
Wilmington 94
Atlantic City 94
JFK 92

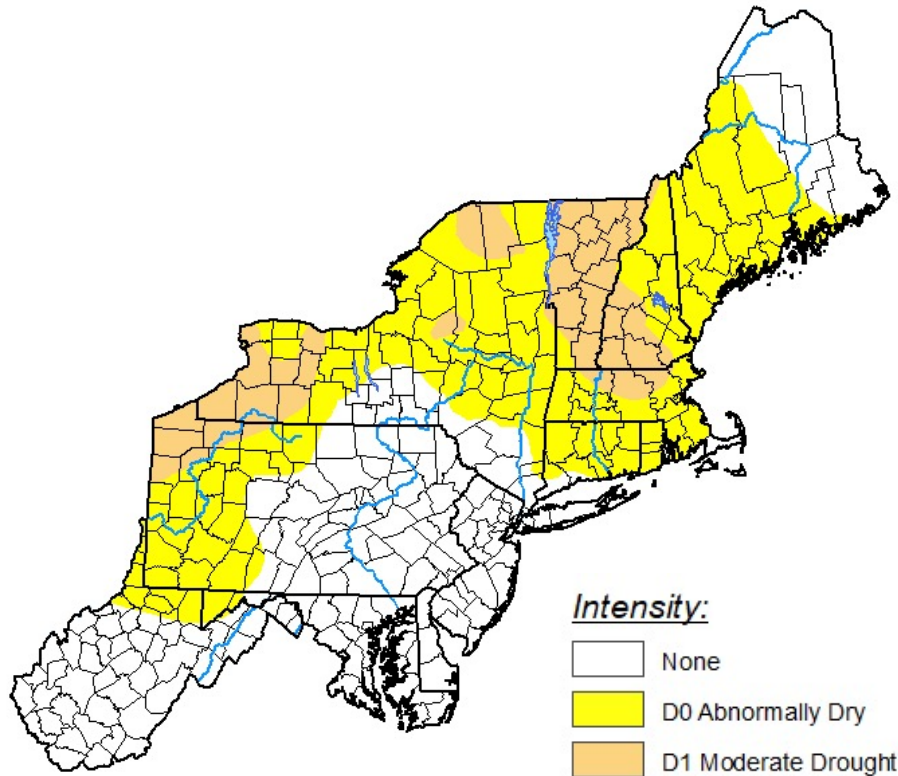
Daily Records Broken for Min Temps

May 23

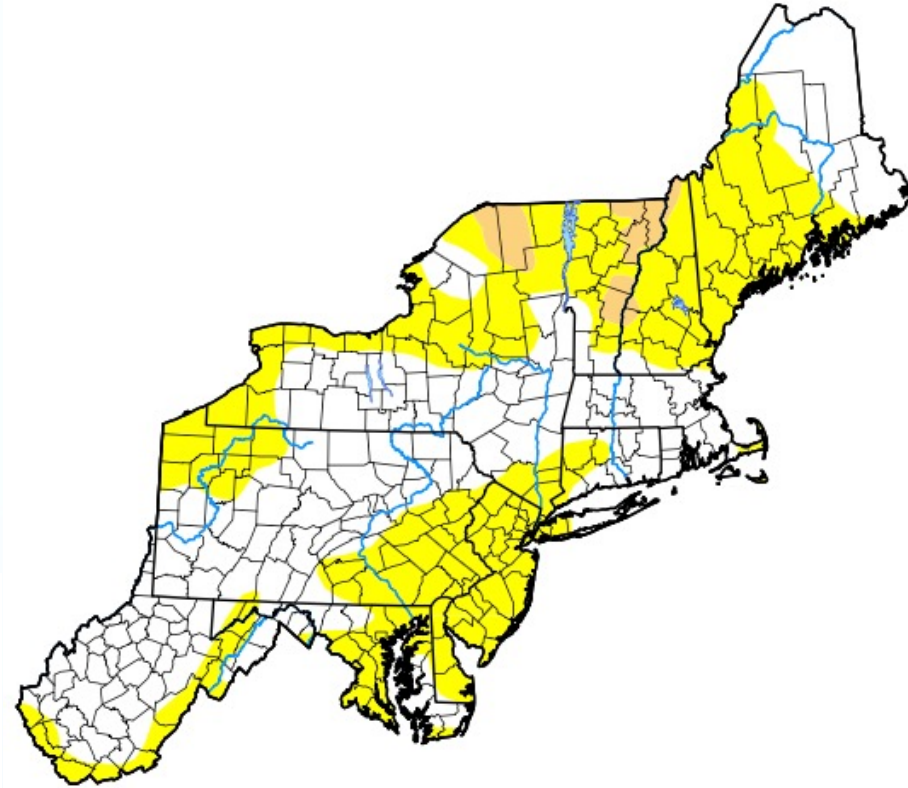
Washington 74
Wilmington 72
Baltimore 70
Newark 68
Islip 65
JFK 68
Harrisburg 70
Philadelphia 74



Drought Monitor



April 27:
14% of the region was in a moderate drought
41% was abnormally dry



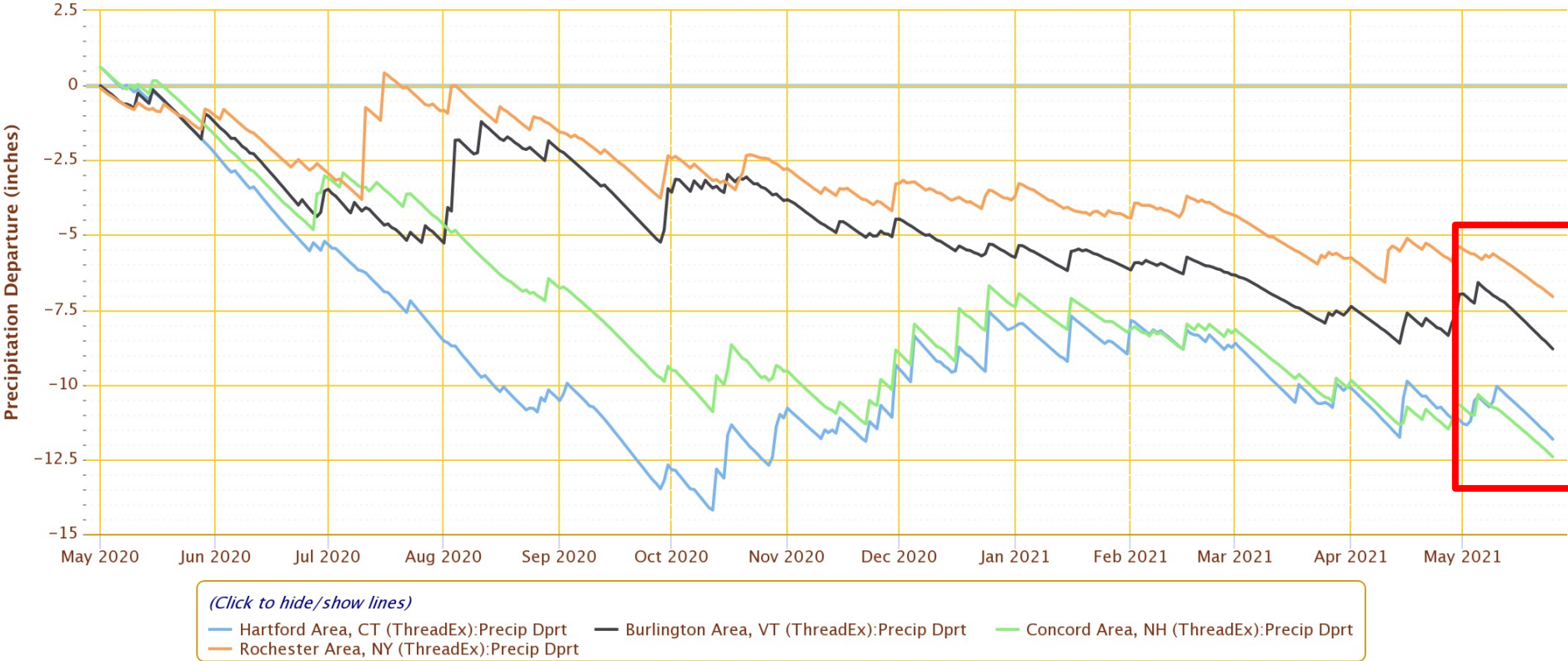
May 25:
3% of the region was in a moderate or severe drought
45% was abnormally dry



Precipitation

Accumulated Precipitation Departure from Normal

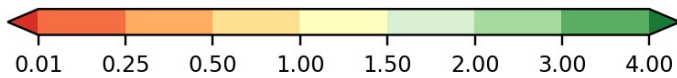
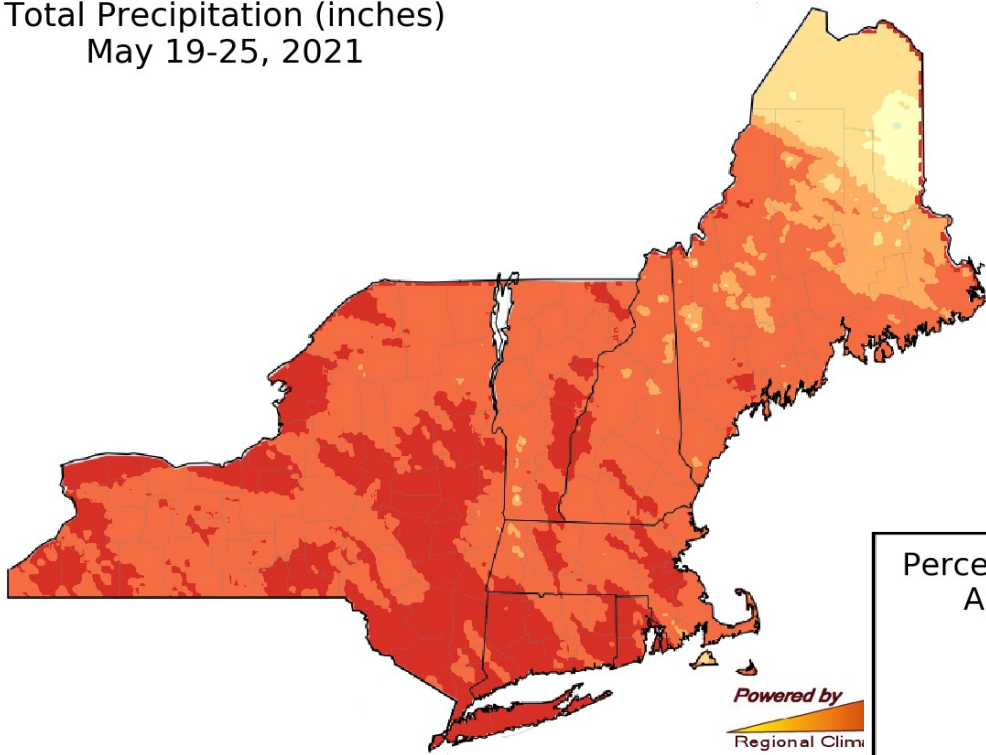
Green/black diamonds represent subsequent/missing values



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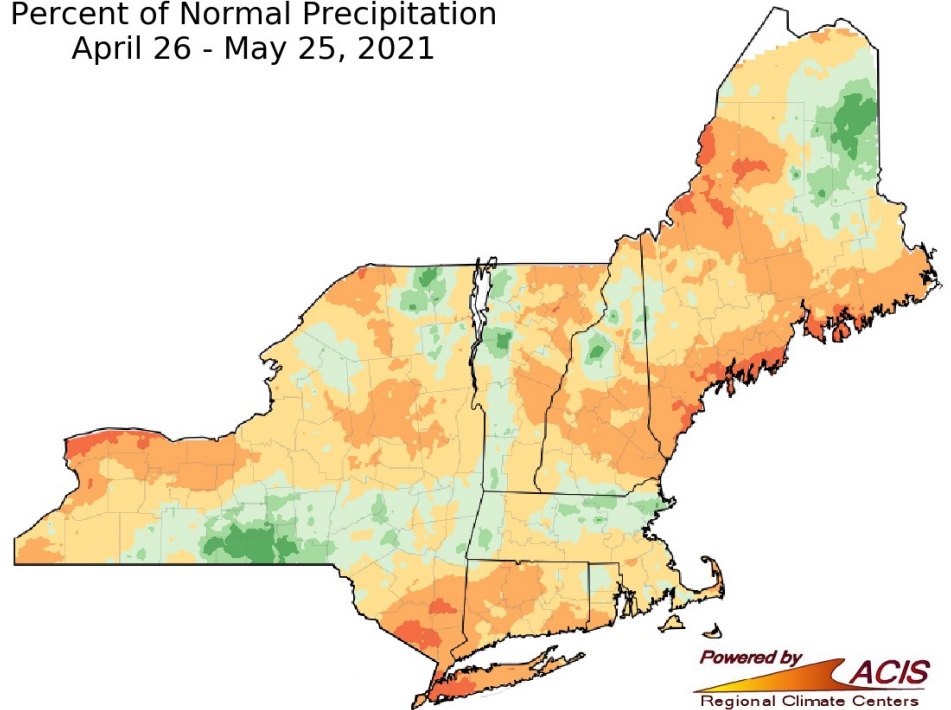


Total Precipitation (inches)
May 19-25, 2021

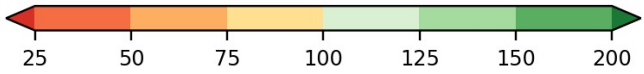
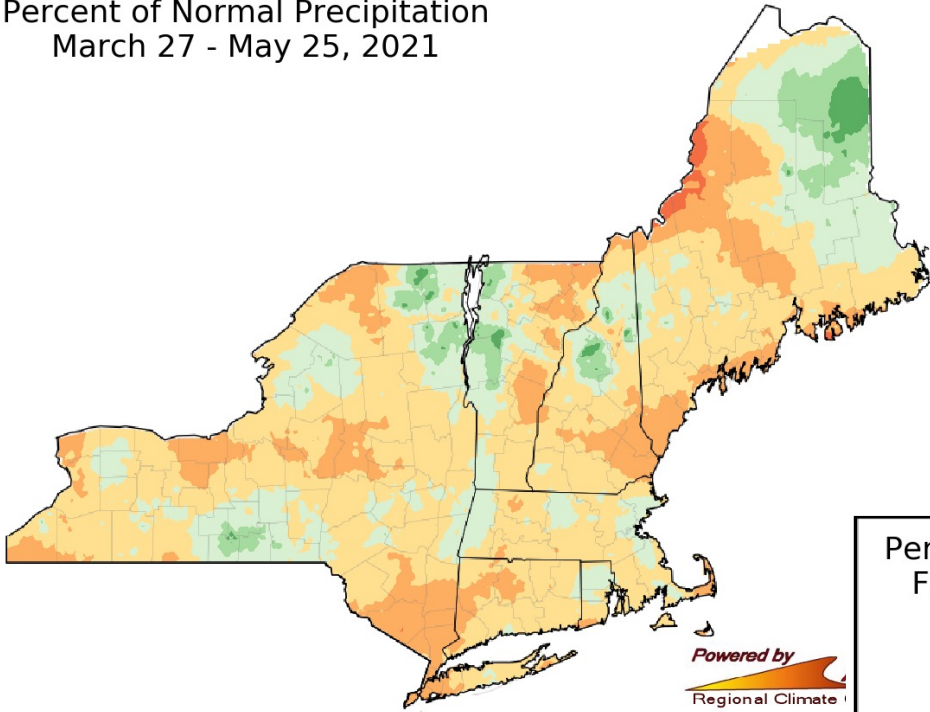


Precipitation

Percent of Normal Precipitation
April 26 - May 25, 2021

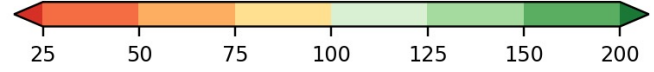
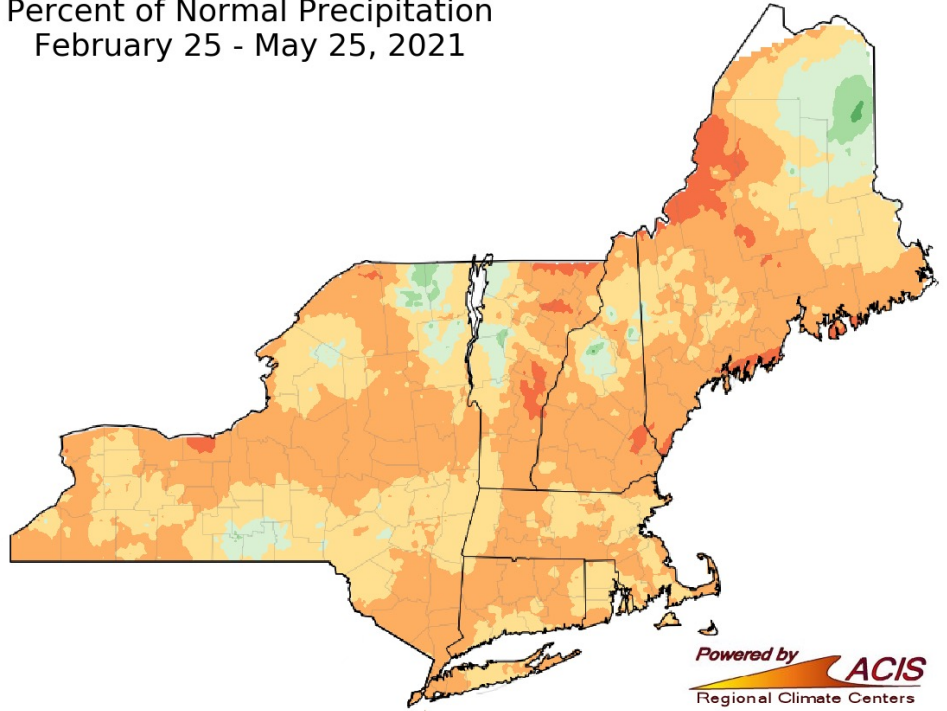


Percent of Normal Precipitation
March 27 - May 25, 2021

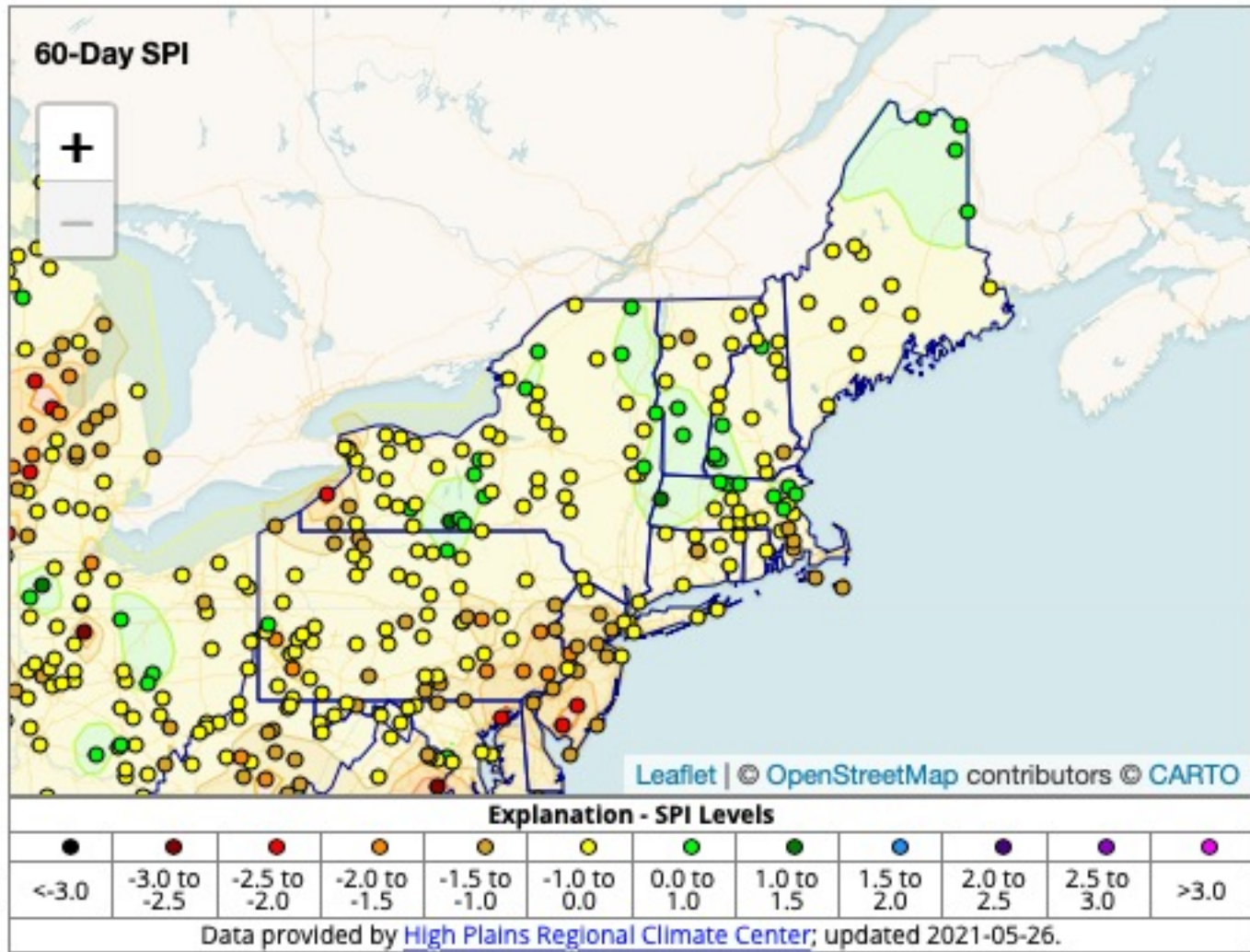


Precipitation

Percent of Normal Precipitation
February 25 - May 25, 2021

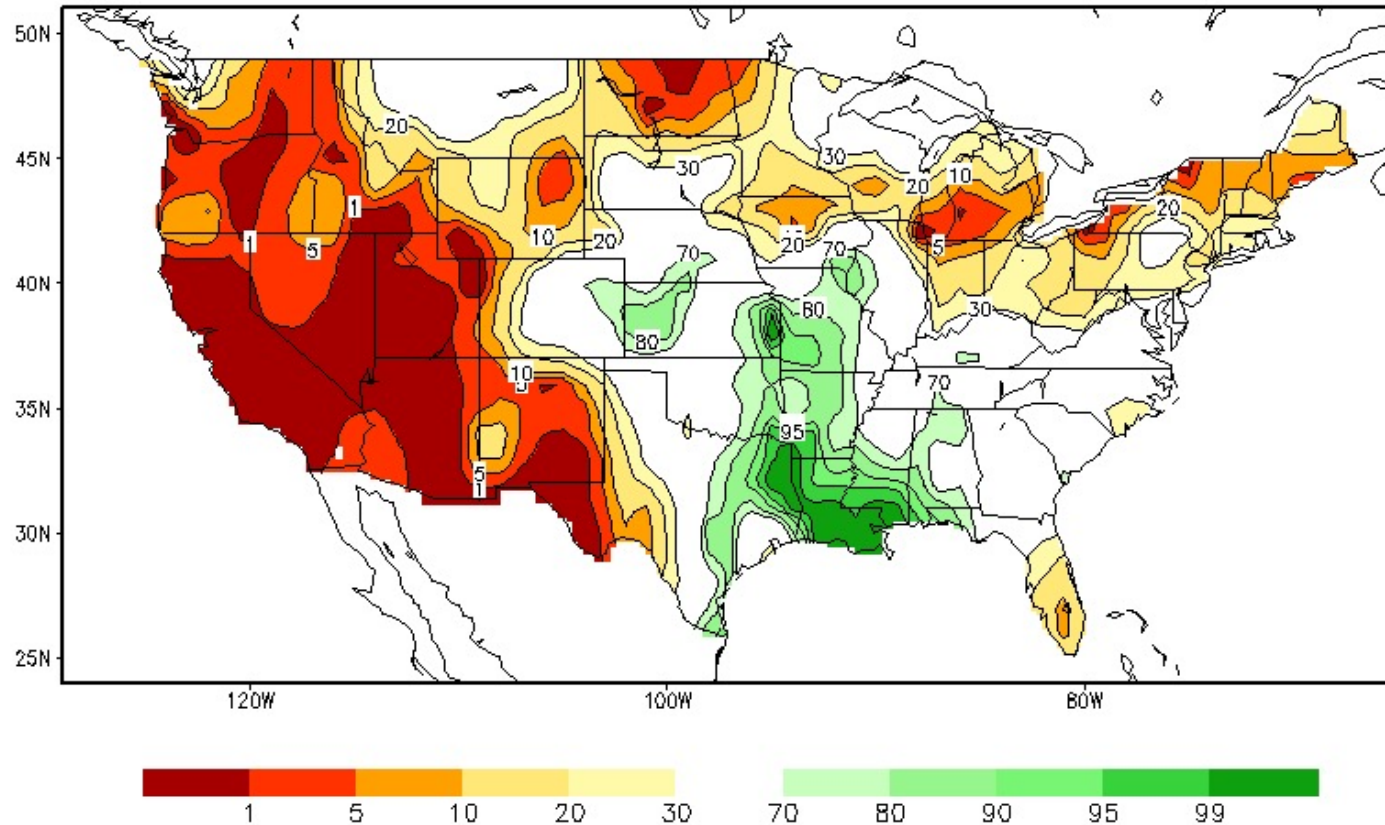


Standardized Precip Index

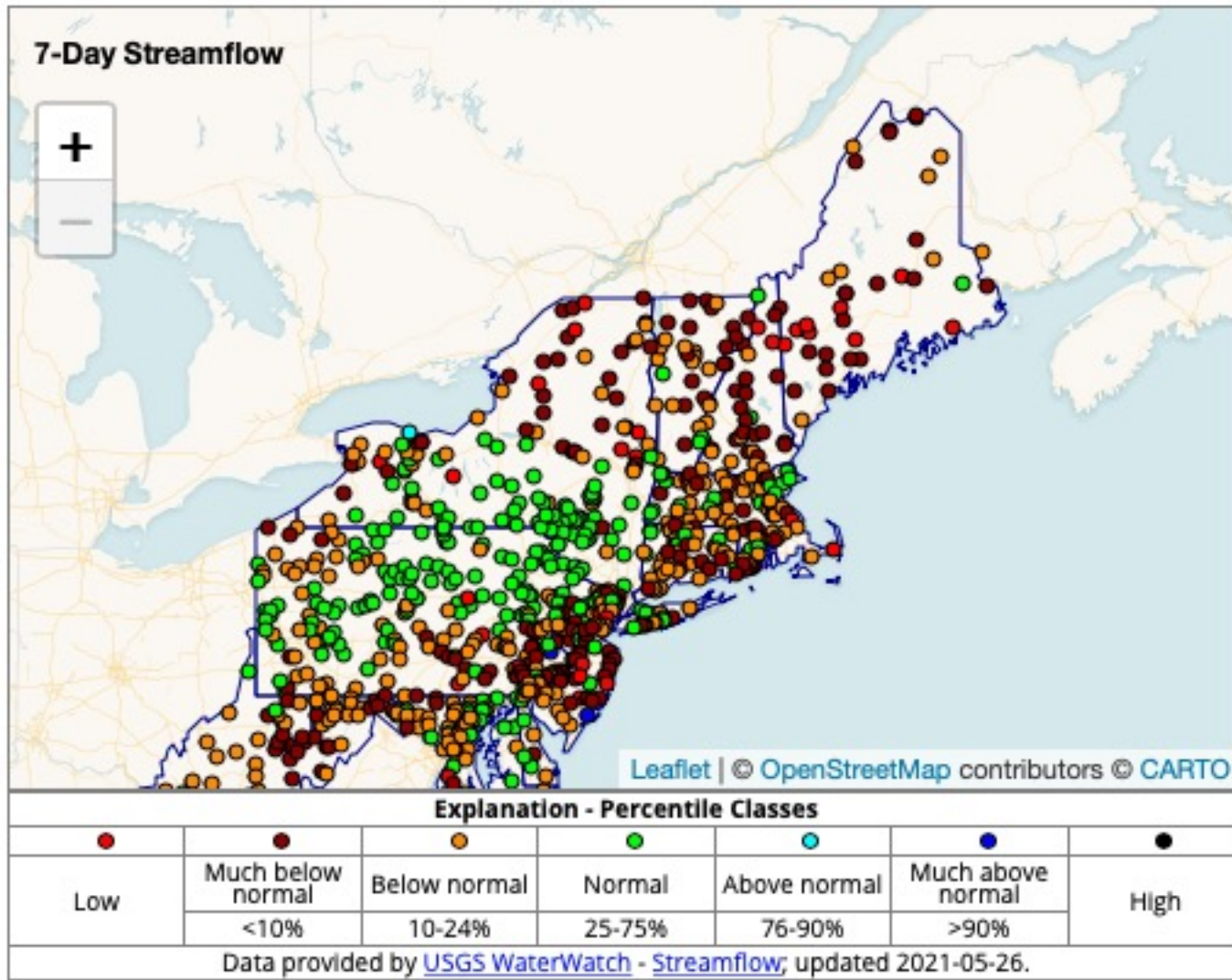


Soil Moisture

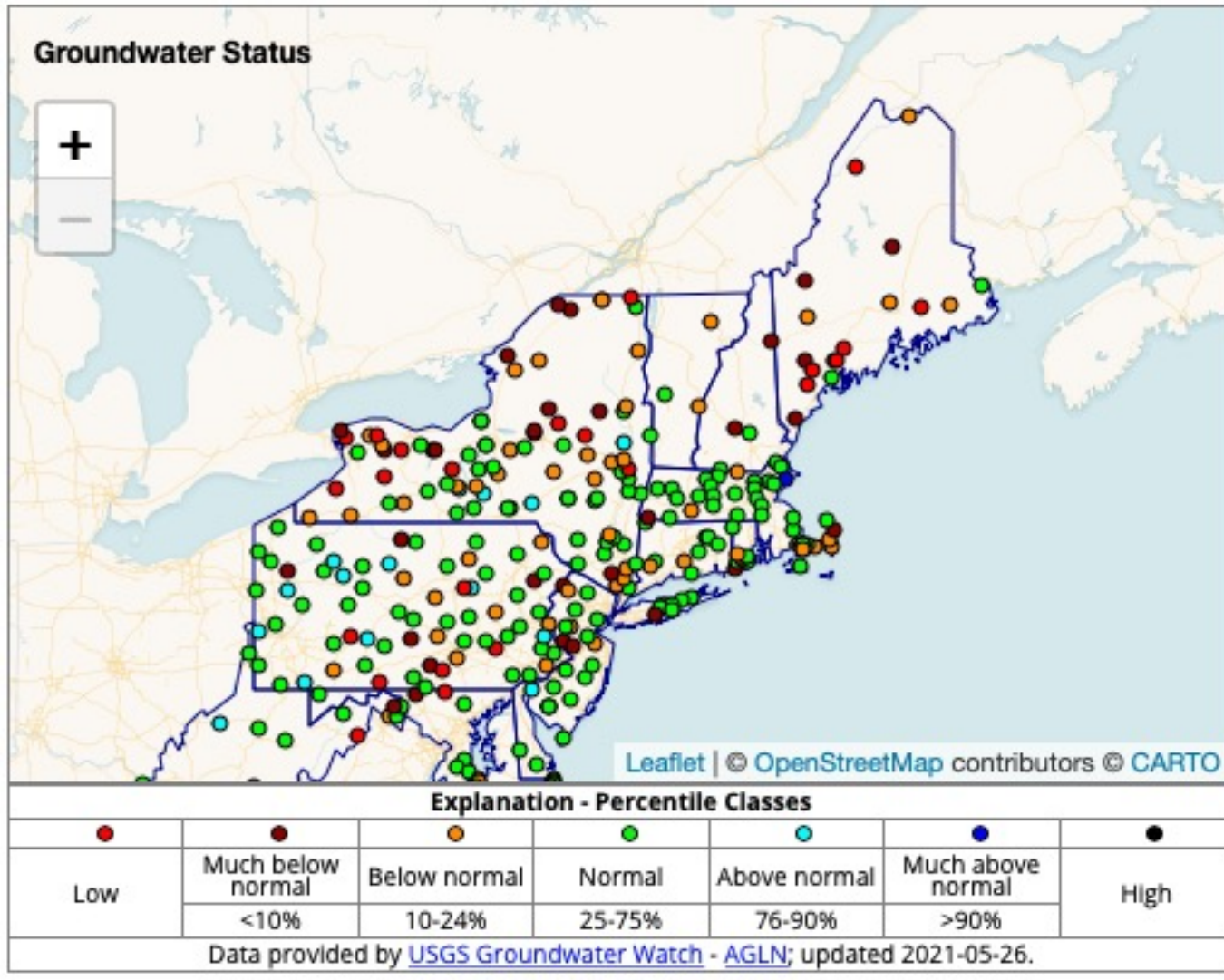
Calculated Soil Moisture Ranking Percentile
MAY 25, 2021



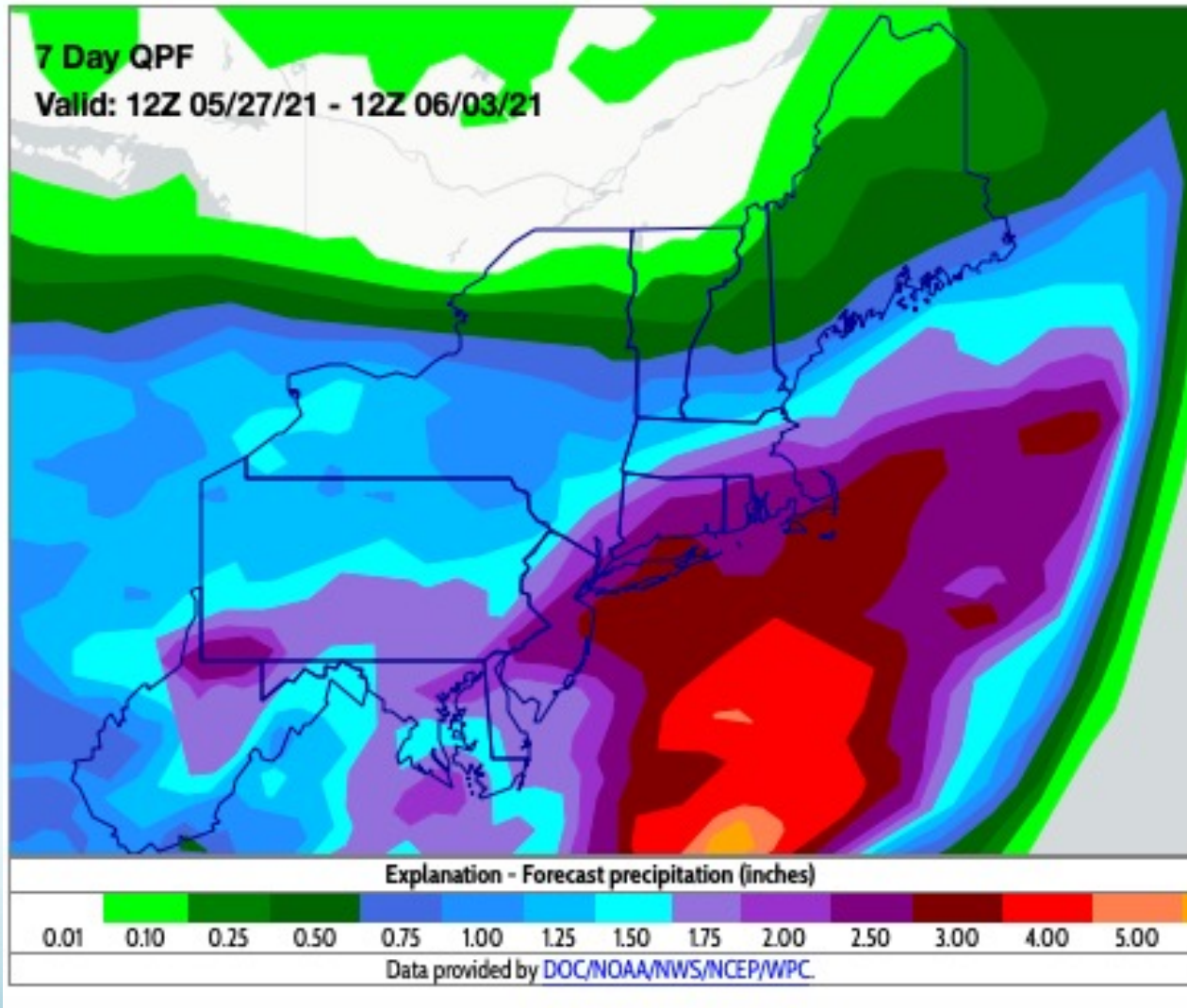
Streamflow



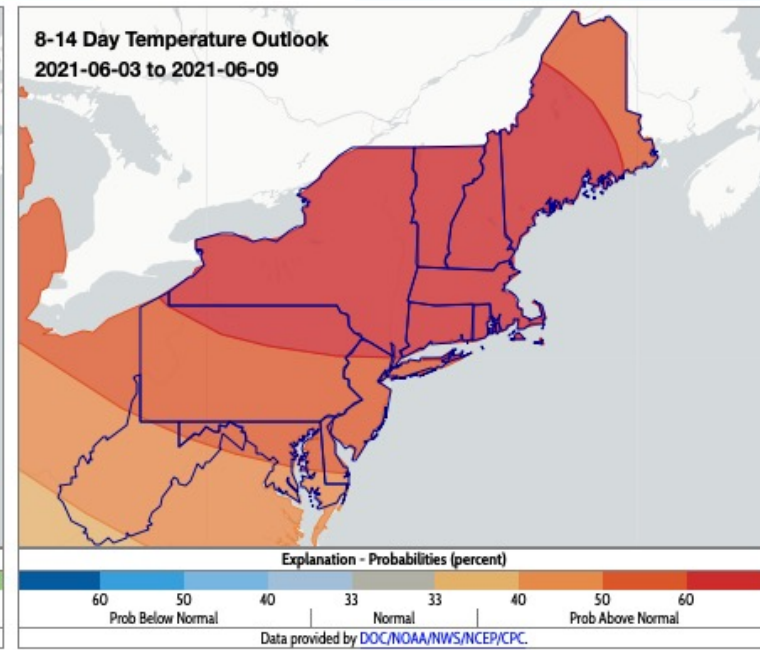
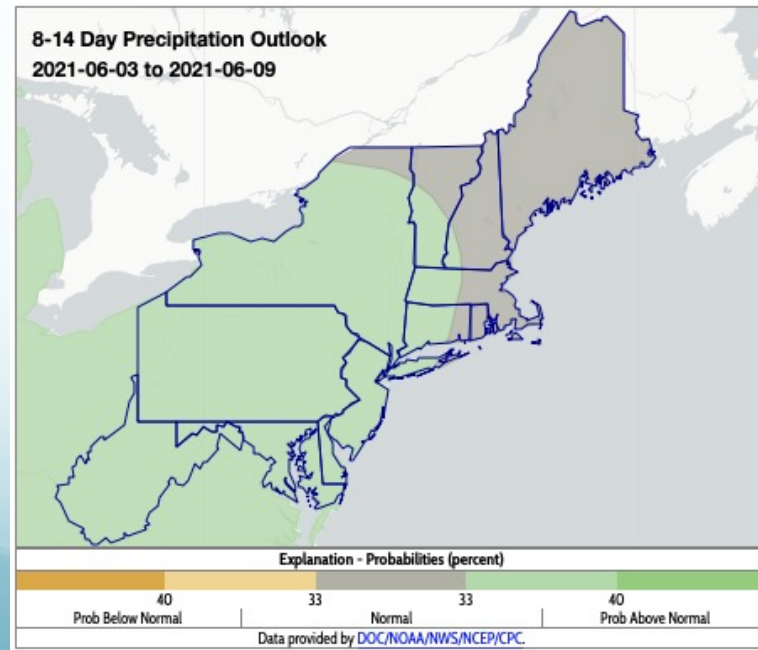
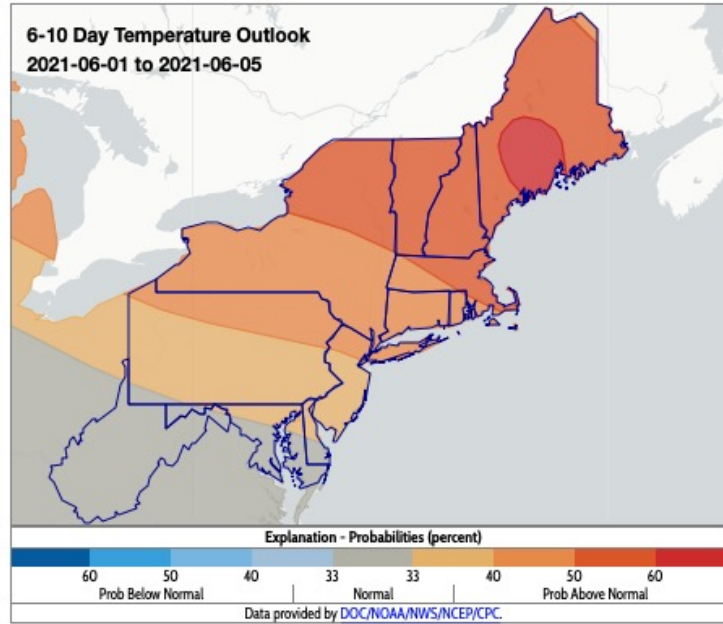
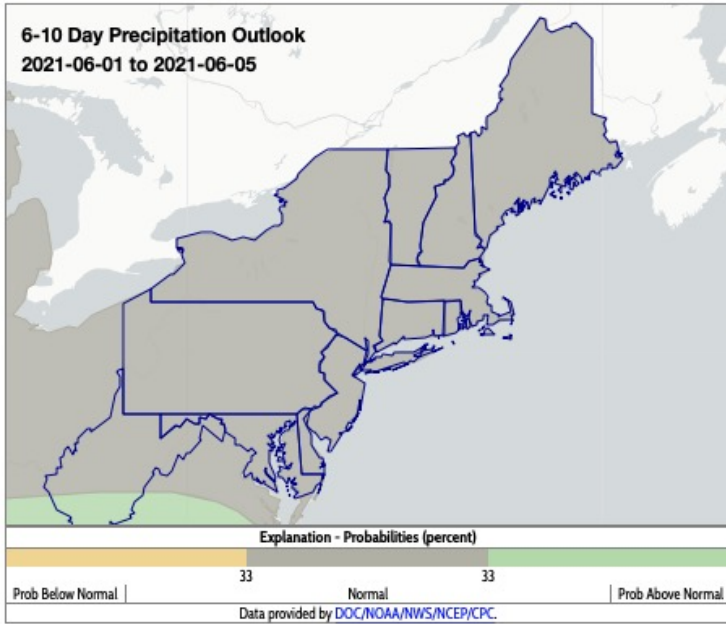
Groundwater



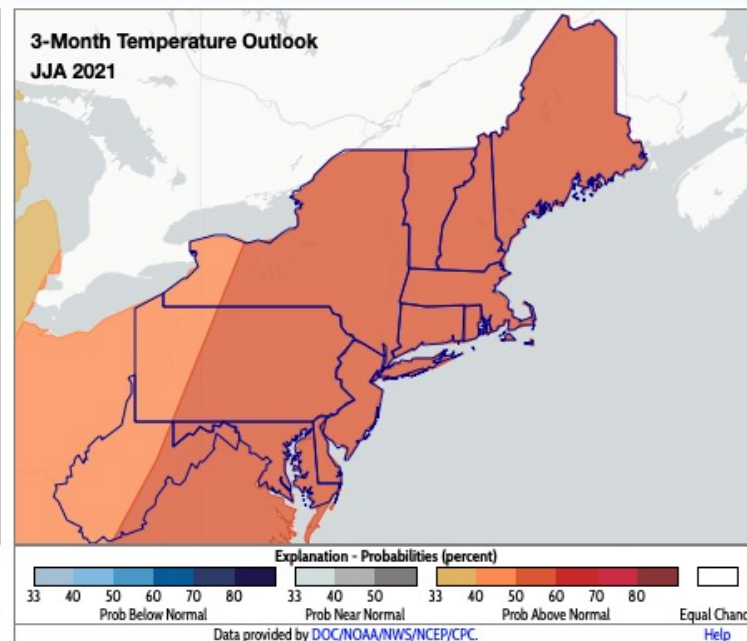
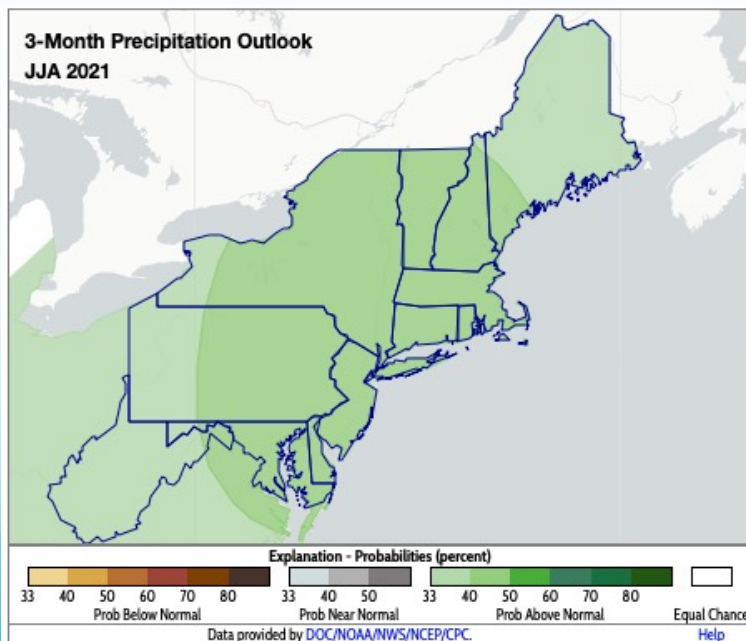
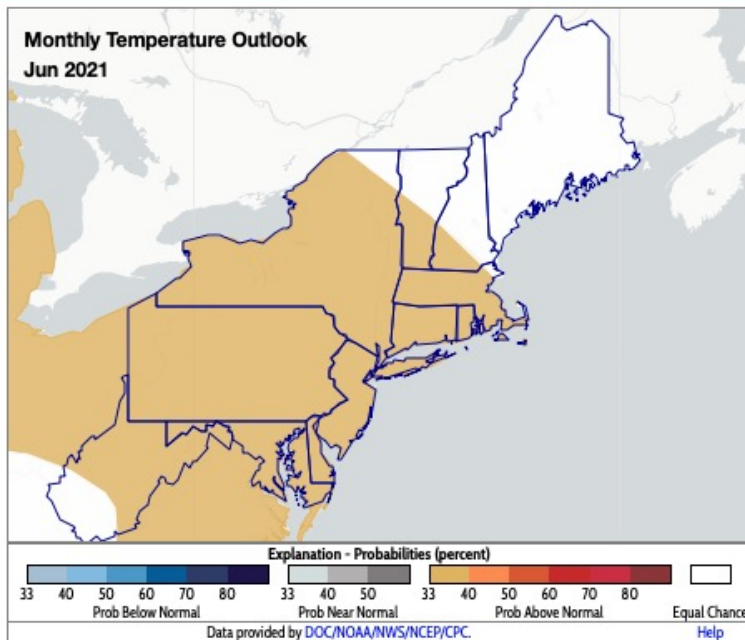
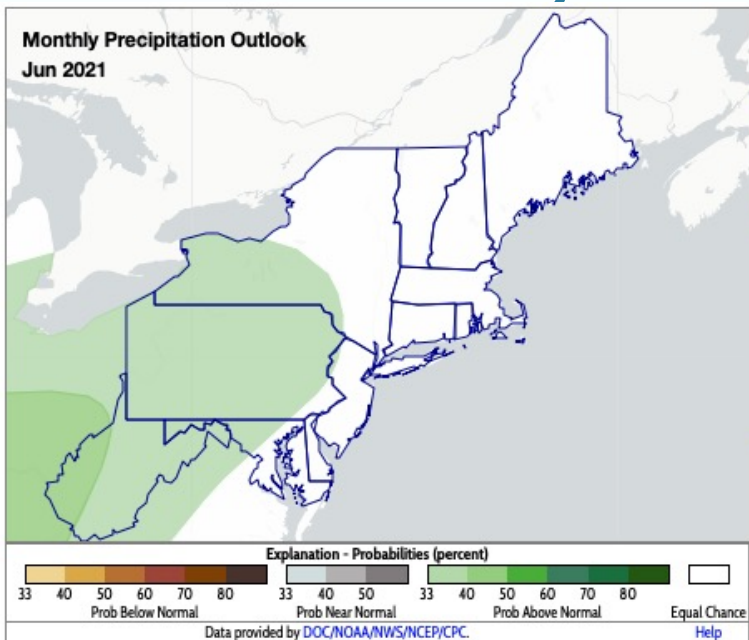
Precipitation Forecast



Short-term Outlooks



Monthly & 3-Month Outlooks



Contact Information

- nrcc@cornell.edu

Upcoming Webinars

- Tuesday, June 29 at 9:30am
 - Ocean climate series 1 of 2
- Thursday, July 29 at 9:30am
 - Ocean climate series 2 of 2
- Tuesday, August 31 at 9:30am
 - Atlantic Hurricane Season Outlook

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