



# Southern



# New England

**April 2016**

Spring has sprung. A season for new growth, new growth in our network as well. Our three states were able to add 122 new observers during March Madness. Some of them have started reporting and added to our record month of reporting. We look forward to the others reporting soon. A warm welcome to all of our new observers.

The growth of spring time also marks the anniversaries of our respective three states coming into network. To mark those anniversaries, these next three newsletters will spend a section marking the entrance anniversaries of Rhode Island this month, Massachusetts in next month's newsletter, and Connecticut with June's newsletter.

We have reached the half way mark through the Water Year. April is a good time to look back at the past 6 months and see what our stations have measured and reported.

As Nolan reminds us during this time of year, "As the days get longer, the storms get stronger." It is as good as time as any to take a closer look at our two real-time reports: Hail and Significant Weather.

Don't skip over the closing to this newsletter. Patriots Day comes in April and your volunteer efforts do not pass by unnoticed. Read how both occurrences come together.

## **The “H” in CoCoRaHS is for Hail**

The season for convective thunderstorms is coming soon, so a brief mention about the often overlooked part of our network name, hail. The “H” in CoCoRaHS may be silent, but rest assured, when hail falls and makes impact, the impact is not silent.

In the months to come, should hail stones from above fall on your station, please fill out and submit a Hail Report from the website.



Why? Large hail can be followed by damaging winds or even a tornado. In the life cycle of a thunderstorm, most of the time when we have large hail, we get the downburst winds when the storm collapses. But sometimes, we can experience weak tornadoes or stronger ones like Springfield MA experienced on June 1, 2011.

Hail reports find their way directly and in real-time to your local weather forecast office. This can help your forecast correlate what they are seeing on weather radar, and provide the necessary information to issue warnings for areas in the storm’s path. This is an opportunity for you to “See something. Say something.” to alert your forecast office in real-time to take a closer look into what is occurring at your area.



Hail reports find their way into our database. Use the “View Data” options available on the website and make an inquiry to the Hail reports being submitted throughout the network.

Key tips: Report the time of day that hail started and stopped. A small ruler to measure the hail. Taking a picture of the hail stones next to a ruler can help your memory as you report the size of the hail stones.

If you’re feeling nostalgic, a link to the [Hail Form](#) from the list of Printable Forms.

## **Significant Weather Reports**

July 28<sup>th</sup>, 1997. The day of the severe and deadly flash flood that struck Ft. Collins, Colorado. We measure and report our rain, hail and snow throughout the year. But the project's roots go back to something more than measuring and reporting every day of the year. The project's roots go back to a significant weather event.

As CoCoRaHS observers, and with your safety coming first, you have all been deputized to report in real-time should you experience a significant weather event. For rainfall, a simple guideline to use is 1" or more of rainfall in 1 hour or less in time. With the comments box in the report, you can report wind damage.

Your real-time Significant Weather Report comes across ***immediately*** upon the screens of your local weather forecast office. A clever design of this project. You have the opportunity to make a difference, to give lead time to others of significant weather.



July 23<sup>rd</sup>, 2008. Wednesday. 3:15pm. Hope Valley, Rhode Island, in the southwest part of the state. 1" of rain fell in the past 15 minutes and a Significant Weather Report is submitted from Station RI-WS-1. Immediately, that report comes across every forecaster's screen at the Taunton MA forecast office. A Flash Flood Warning is issued for the cities near Narragansett Bay, in time for the afternoon rush. A second report is submitted that hour from that same station in Hope Valley, RI, reporting 1.36" in 30 minutes.

1 timely and accurate report made a difference. Not only to the cities in Rhode Island but to a new customer of the CoCoRaHS network: The National Weather Service Forecast Office in Taunton MA! As we celebrate, this month, the anniversary of the entrance of Rhode Island to our network, we also emphasize the value of real-time Significant Weather Reports.

Significant Weather Reports are supplementary. Make your regular Daily Report at your normal observation time.

## **Detail and Summary for March 2016**

From the National Weather Service (NWS) Climate sites for March 2016.

Location	Station ID	Mar 2016 Precip	Mar departure from normal	Jan-Feb-Mar Precip	3 month departure from normal	Oct-Mar Precip	6 month departure from normal	Mar 2016 Snowfall	Mar snowfall departure from normal
Pittsfield MA	PSF	2.26"	-1.11"	7.63"	-2.26"	18.76"	-5.15"		
Bridgeport CT	BDR	2.17"	-1.88"	9.33"	-1.11"	18.62"	-5.10"	2.3"	-2.8"
Hartford CT	BDL	2.20"	-1.42"	9.03"	-1.88"	20.63"	-4.47"	2.9"	-3.5"
Worcester MA	ORH	3.49"	-0.72"	10.88"	-1.26"	21.01"	-5.18"	5.5"	-5.9"
Providence RI	PVD	2.68"	-2.33"	11.03"	-2.58"	21.76"	-6.33"	2.6"	-2.9"
Boston MA	BOS	3.16"	-1.16"	10.60"	-0.75"	19.46"	-4.38"	4.1"	-3.7"

March was another dry month in the alternating sequence of wet/normal precip month followed by a dry month. 6 month totals show our region a good month's worth below normal on precipitation.

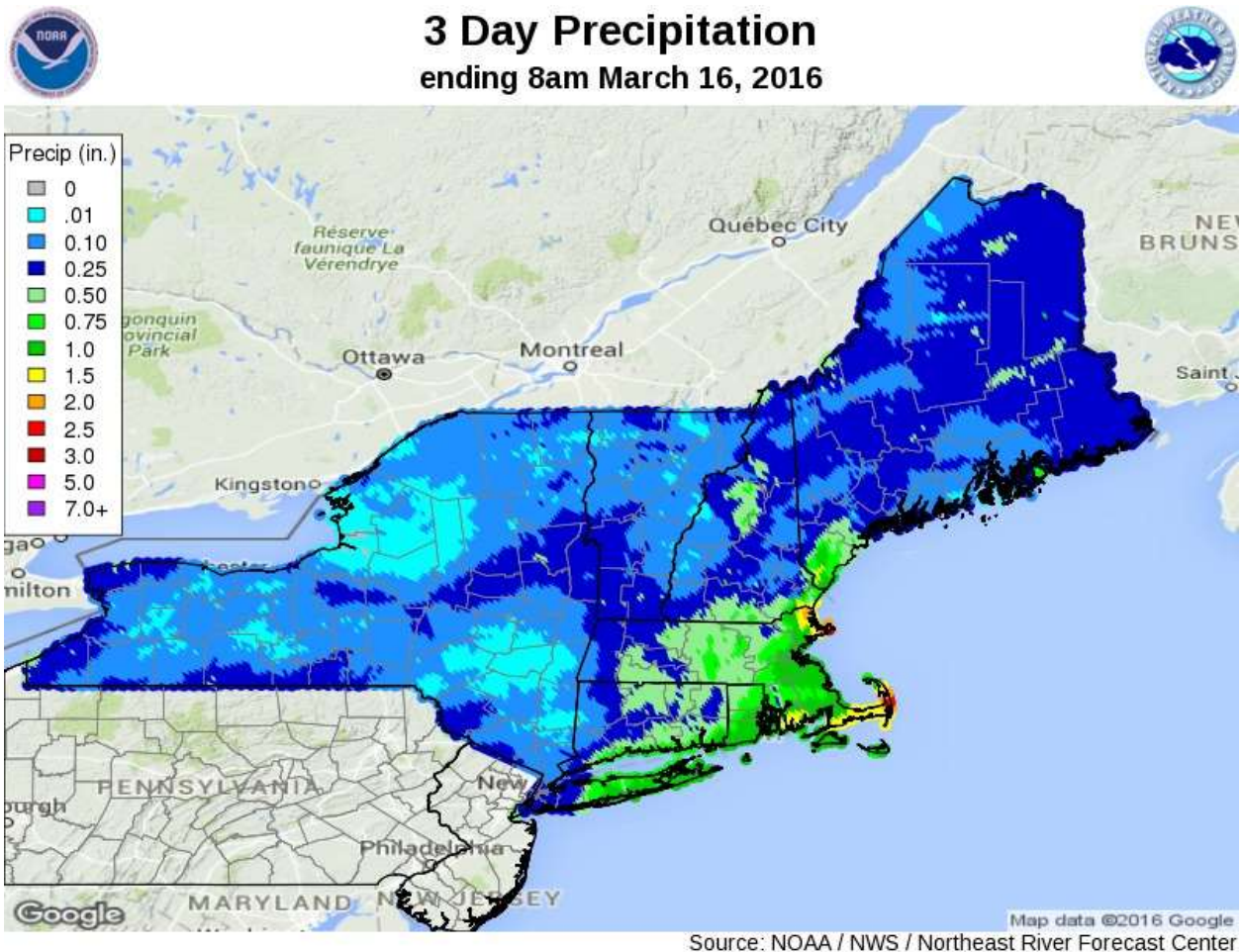
Our network highlighted the localized rain that came on the 15<sup>th</sup>, yielding more rain east and less to the west. Map from the River Forecast Center below to point out that event.

Spring entered on March 20<sup>th</sup> and so did the Winter Storm Warnings for eastern sections. 3"-6" of snow fell to bring in the first day of spring.

The last week of March had one last widespread rain event for the 28<sup>th</sup>, reported on the 29<sup>th</sup>.

## From your reports for March 2016

Observers reporting	196
Reported all 31 days	75
Completed by Multi-Day Reports	9
Missing 1 or 2 reports	26
Daily Reports	4204
Zero Reports	2135
Non-Zero Reports	2069
Comments	667
Multi-Day Reports	73
SWE Monday Reports	95
Highest Daily Snowfall Report	6.1" from Groveland MA (MA-ES-4) reported on 3/21
Highest Daily Report	1.90" from Charlestown RI (RI-WS-26) reported on 3/15



A record 84 stations with complete precip data for March appear here, and the list carries on to a 3<sup>rd</sup> page. Keep this list growing.

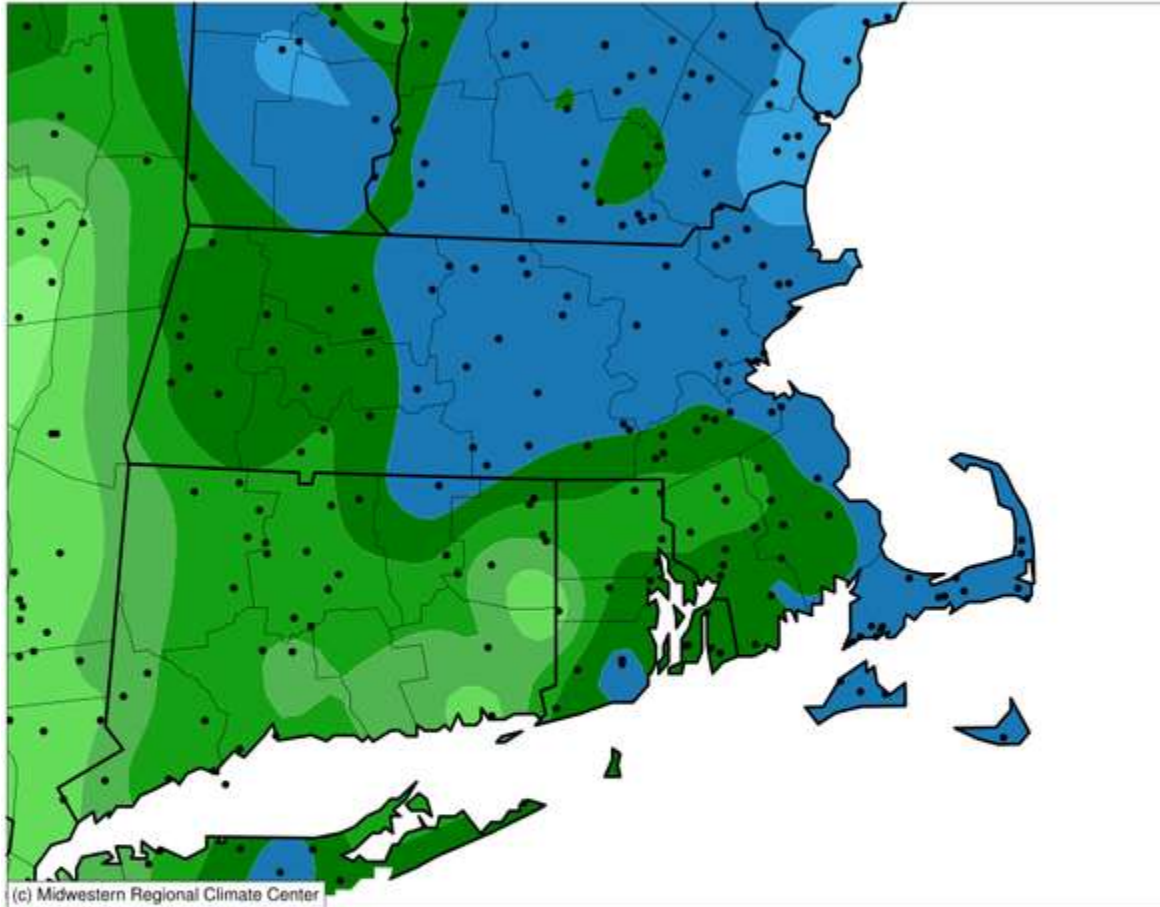
Station	Location	Precip	Snowfall	County & State
MA-BE-3	Stockbridge .2 NNE	2.64"	0.0"	Berkshire MA
MA-BE-10	Pittsfield 2.0 NNW	3.26"	0.0"	Berkshire MA
MA-BE-4	Becket 5.6 SSW	3.14"	0.8"	Berkshire MA
CT-LT-9	New Hartford Center 3.2 SW	2.44"	2.8"	Litchfield CT
CT-FR-29	Ridgefield 1.9 SSE	2.46"	3.4"	Fairfield CT
CT-FR-3	New Canaan 1.9 ENE	2.40"	3.2"	Fairfield CT
CT-FR-9	Brookfield 3.3 SSE	1.92"	2.4"	Fairfield CT
CT-FR-23	Shelton 1.3 W	2.45"	2.7"	Fairfield CT
CT-NH-16	Milford 1.8 E	2.80"	4.1"	New Haven CT
CT-NH-14	Prospect 1.9 ENE	2.32"	3.6"	New Haven CT
MA-FR-10	Conway 0.9 SW	3.12"	0.0"	Franklin MA
MA-FR-12	Sunderland 1.3 SE	2.75"	0.8"	Franklin MA
MA-HS-7	Plainfield 2.2 SW	3.10"	1.2"	Hampshire MA
MA-HS-2	Westhampton 1.8 SW	2.98"	2.1"	Hampshire MA
MA-HS-10	Northampton 1.6 NE	2.77"	0.7"	Hampshire MA
CT-HR-24	Collinsville 0.9 NW	2.45"	2.7"	Hartford CT
CT-HR-28	North Canton 0.8 SSW	2.38"	2.0"	Hartford CT
CT-HR-23	Southington 0.9 SSE	2.07"	0.0"	Hartford CT
CT-HR-15	Southington 3.0 E	2.69"	4.1"	Hartford CT
CT-HR-8	North Granby 1.3 ENE	2.54"	0.0"	Hartford CT
CT-HR-29	Simsbury Center 0.8 S	2.46"	2.5"	Hartford CT
CT-HR-9	West Hartford 2.7 NNW	2.39"	2.5"	Hartford CT
CT-HR-18	Berlin 2.4 SSE	2.38"	4.3"	Hartford CT
CT-HR-11	West Hartford 2.7 SSE	2.33"	3.5"	Hartford CT
CT-HR-6	Wethersfield 1.2 WSW	2.26"	4.0"	Hartford CT
CT-HR-22	East Hartford 1.3 E	2.86"	4.0"	Hartford CT
CT-HR-5	Enfield 1.5 SE	2.82"	1.8"	Hartford CT
CT-HR-7	Central Manchester 2.7 SW	2.70"	0.0"	Hartford CT
CT-TL-2	Staffordville 0.4 NNW	3.50"	6.2"	Tolland CT
MA-WR-8	Fitchburg 1.6 SSW	3.36"	0.0"	Worcester MA
MA-WR-22	Fitchburg 2.0 NNE	3.65"	6.7"	Worcester MA
MA-WR-13	Leominster 1.5 S	3.42"	6.2"	Worcester MA
MA-WR-1	Milford 2.3 NNW	3.20"	5.0"	Worcester MA
CT-WN-6	Dayville 2.0 ENE	2.21"	3.5"	Windham CT
CT-WN-8	Moosup 1.7 NE	1.72"	4.0"	Windham CT
CT-WN-4	East Killingly 1.3 SW	1.97"	3.1"	Windham CT
CT-NL-5	Oakdale 2.6 WNW	3.47"	0.0"	New London CT



CT-NL-8	Uncasville-Oxoboxo Valley 1.6 ENE	3.19"	2.1"	New London CT
RI-PR-33	Greenville 0.7 NNW	2.47"	4.5"	Providence RI
RI-PR-17	Cranston 4.1 E	2.84"	3.0"	Providence RI
RI-PR-35	Cumberland Hill 3.7 E	2.32"	1.5"	Providence RI
RI-PR-32	Providence 2.3 NE	2.15"	2.5"	Providence RI
RI-NW-4	Middletown 1.1 SW	2.51"	3.5"	Newport RI
RI-NW-11	Tiverton 0.8 SSW	3.07"	3.5"	Newport RI
RI-NW-5	Little Compton 1.7 NW	2.44"	3.2"	Newport RI
RI-NW-7	Little Compton 0.6 E	2.89"	2.8"	Newport RI
MA-BR-17	North Attleboro 0.8 E	1.88"	0.0"	Bristol MA
MA-BR-23	Attleboro 0.9 ENE	1.88"	1.9"	Bristol MA
MA-BR-2	Rehoboth 2.1 N	2.35"	3.9"	Bristol MA
MA-BR-3	Norton 1.8 NNE	2.49"	4.4"	Bristol MA
MA-BR-8	Dighton 1.1 WSW	2.73"	4.2"	Bristol MA
MA-BR-14	Dartmouth 2.5 SSW	2.03"	0.0"	Bristol MA
MA-MD-47	West Townsend 0.5 W	3.13"	5.8"	Middlesex MA
MA-MD-12	Acton 1.3 SW	3.76"	4.5"	Middlesex MA
MA-MD-51	Maynard 0.7 ESE	3.65"	5.5"	Middlesex MA
MA-MD-42	Holliston 0.8 S	3.26"	3.7"	Middlesex MA
MA-MD-60	Billerica 2.0 W	3.56"	5.9"	Middlesex MA
MA-MD-52	Lexington 0.6 SW	3.75"	5.8"	Middlesex MA
MA-MD-57	Lexington 0.3 SE	4.02"	3.5"	Middlesex MA
MA-MD-45	Wilmington 1.5 NE	3.80"	5.2"	Middlesex MA
MA-MD-7	Winchester 0.7 SE	3.72"	4.5"	Middlesex MA
MA-MD-44	Medford 1.2 W	3.69"	2.6"	Middlesex MA
MA-MD-43	Somerville 0.8 SSE	3.44"	3.9"	Middlesex MA
MA-ES-20	Haverhill 0.7 N	3.58"	7.4"	Essex MA
MA-ES-4	Groveland 0.5 WSW	3.64"	7.3"	Essex MA
MA-ES-12	Boxford 2.4 S	3.72"	7.5"	Essex MA
MA-SF-10	Chelsea 0.8 N	3.84"	4.6"	Suffolk MA
MA-SF-2	Winthrop 0.2 N	3.41"	4.1"	Suffolk MA
MA-NF-16	Bellingham 4.7 S	2.50"	0.0"	Norfolk MA
MA-NF-11	Millis 2.0 SW	3.07"	4.5"	Norfolk MA
MA-NF-3	Franklin 0.7 NE	2.91"	2.8"	Norfolk MA
MA-NF-1	Norwood 1.3 NW	2.83"	3.2"	Norfolk MA
MA-PL-19	Rochester 1.2 NNW	3.24"	0.0"	Plymouth MA
MA-PL-18	Pembroke 1.7 ENE	3.12"	3.5"	Plymouth MA
MA-PL-5	Kingston 3.3 WNW	3.19"	4.9"	Plymouth MA
MA-BA-8	Falmouth 1.8 WSW	3.25"	1.4"	Barnstable MA
MA-BA-19	East Falmouth 0.7 NW	3.57"	1.9"	Barnstable MA
MA-BA-3	Falmouth 3.0 E	3.71"	2.2"	Barnstable MA

MA-BA-18	Waquoit 0.6 SSW	3.78"	0.0"	Barnstable MA
MA-BA-47	Mashpee 2.4 WSW	3.42"	1.8"	Barnstable MA
MA-BA-45	Sandwich 0.9 NNE	2.87"	0.0"	Barnstable MA
MA-BA-12	Orleans 1.1 E	3.83"	0.4"	Barnstable MA
MA-BA-30	Eastham 0.6 SW	3.91"	0.8"	Barnstable MA
MA-NT-1	Nantucket 3.8 WNW	3.61"	0.0"	Nantucket MA

**Accumulated Precipitation (in)**  
**March 01, 2016 to March 31, 2016**



0.01 0.1 0.25 0.5 1 1.5 2 2.5 3 4 5 6 8

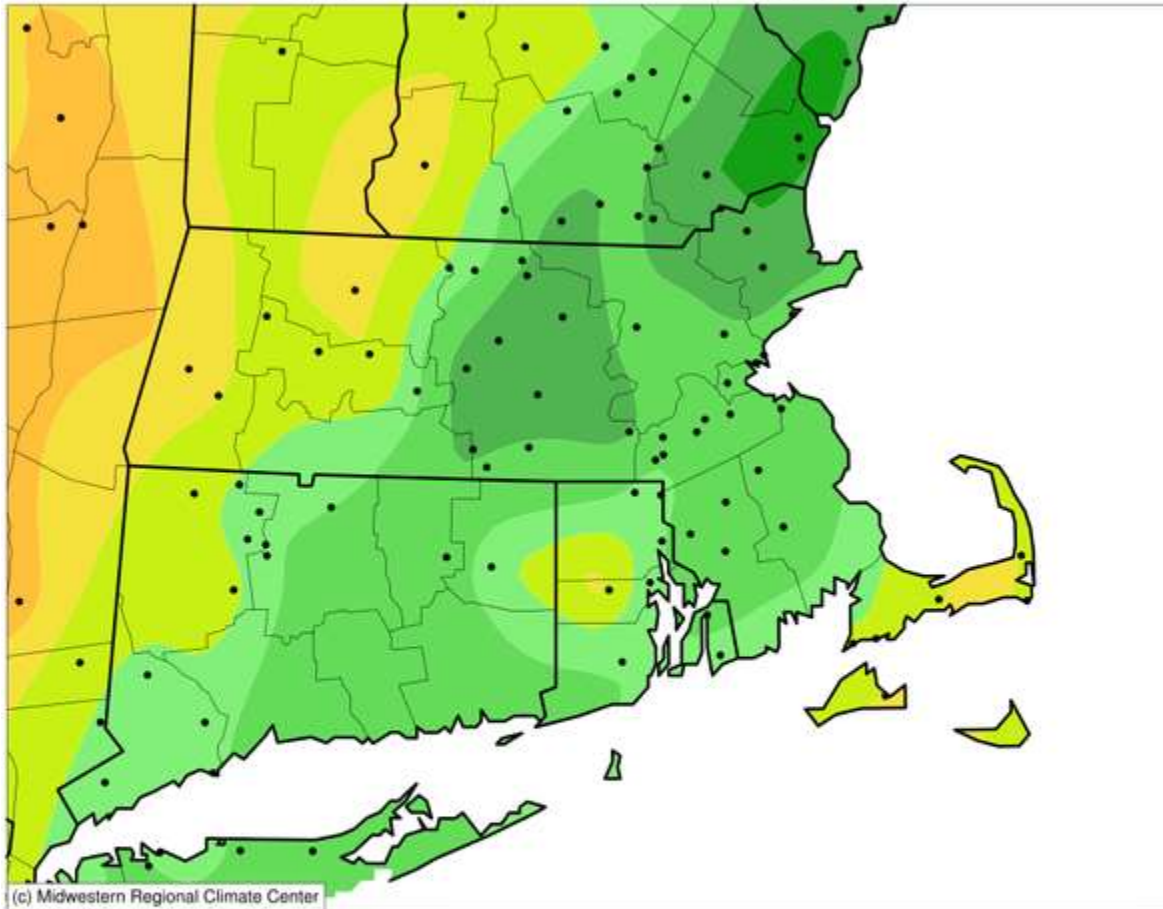
Stations from the following networks used: COOP, FAA, CoCoRaHS, ,

Midwestern Regional Climate Center  
cli-MATE: MRCC Application Tools Environment  
Generated at: 4/6/2016 5:33:17 AM CDT



# Accumulated Snowfall (in)

March 01, 2016 to March 31, 2016



0.01 0.5 1 2 3 5 7.5 10 15 20 25 30 40

Stations from the following networks used: COOP, FAA, CoCoRaHS, ,

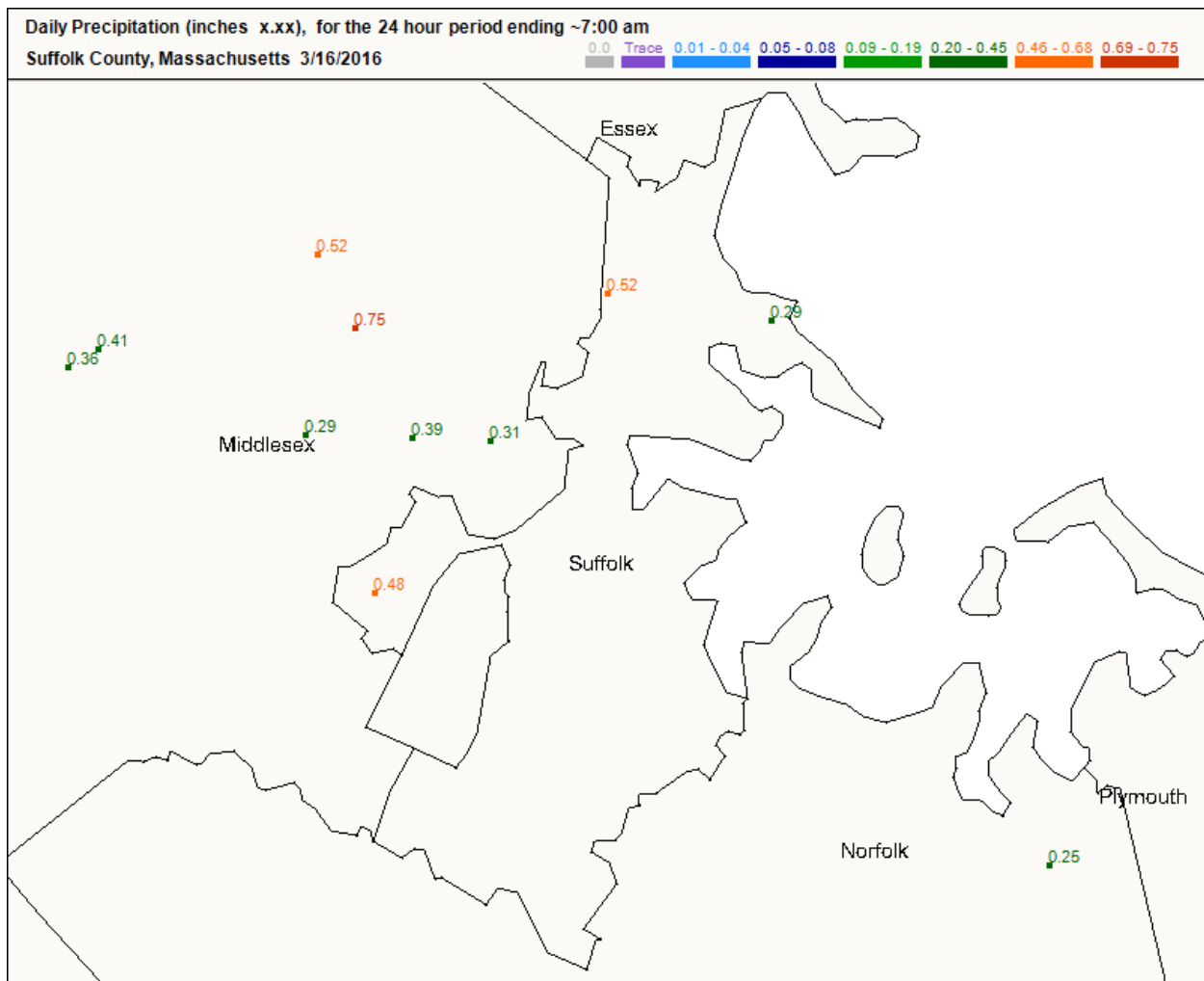
Midwestern Regional Climate Center  
cli-MATE: MRCC Application Tools Environment  
Generated at: 4/6/2016 5:35:31 AM CDT

## **Map of the Month – Suffolk County MA**

The end of the Boston Marathon coincides with a day game at Fenway Park within this county. At 58 square miles in size, it is slightly larger than Nantucket Island, but Suffolk County is home to over 750,000 residents.

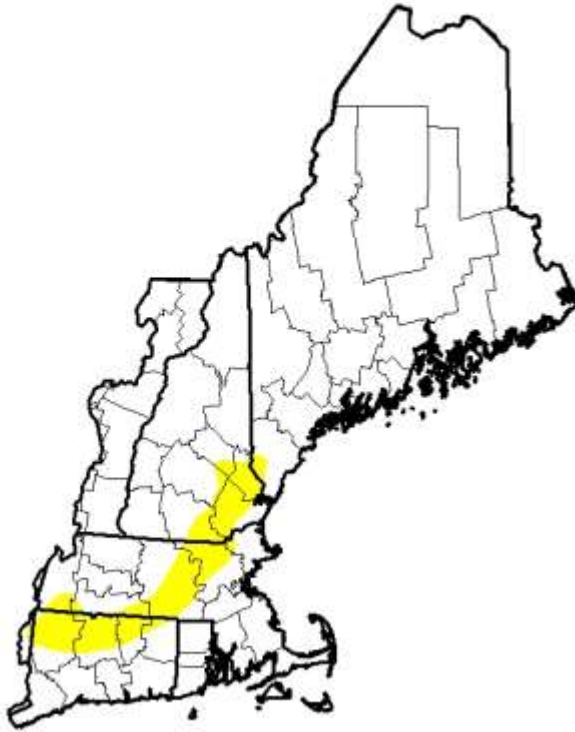
The Mystic River meets Boston Harbor at Charlestown, the Charles River ends in the harbor as well. But look closer within this county and discover the river that can impact mass transit and the dense population, the Muddy River the which runs from the Brookline area to the Charles River.

A county of 750,000 residents needs to have more than 10 CoCoRaHS observers and one automated rainfall gauge at Logan Airport. Help spread the word to family and friends.



From the Drought Monitor. No change for the month.

## U.S. Drought Monitor New England Watershed



**March 29, 2016**

(Released Thursday, Mar. 31, 2016)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	92.62	7.38	0.00	0.00	0.00	0.00
<b>Last Week</b> 3/22/2016	92.62	7.38	0.00	0.00	0.00	0.00
<b>3 Months Ago</b> 12/30/2015	55.73	44.27	15.85	0.00	0.00	0.00
<b>Start of Calendar Year</b> 1/1/2016	55.73	44.27	15.85	0.00	0.00	0.00
<b>Start of Water Year</b> 9/28/2015	49.31	50.69	20.91	0.00	0.00	0.00
<b>One Year Ago</b> 3/31/2015	52.98	47.02	0.00	0.00	0.00	0.00

*Intensity:*

- 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. See accompanying text summary for forecast statements.

**Author:**

*Brad Rippey  
U.S. Department of Agriculture*



<http://droughtmonitor.unl.edu/>

For a viewing explanation on the Drought Monitor, the CoCoRaHS animated video is on [YouTube](#).

## **Happy Anniversary, Rhode Island!**



April 1, 2008. Rhode Island is admitted to CoCoRaHS, the 30<sup>th</sup> state to join our network, and the first of the 6 New England states to join the network.

These 4 observers all joined within a few months of April 2008 and have stayed active since. In total, they have made 10,196 daily reports through the end of March 2016.

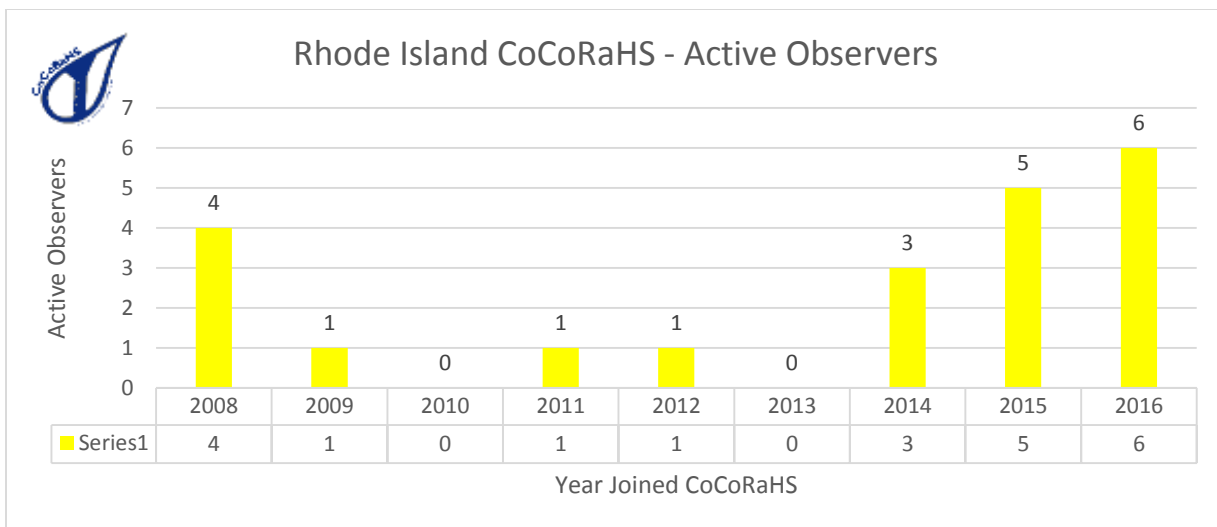
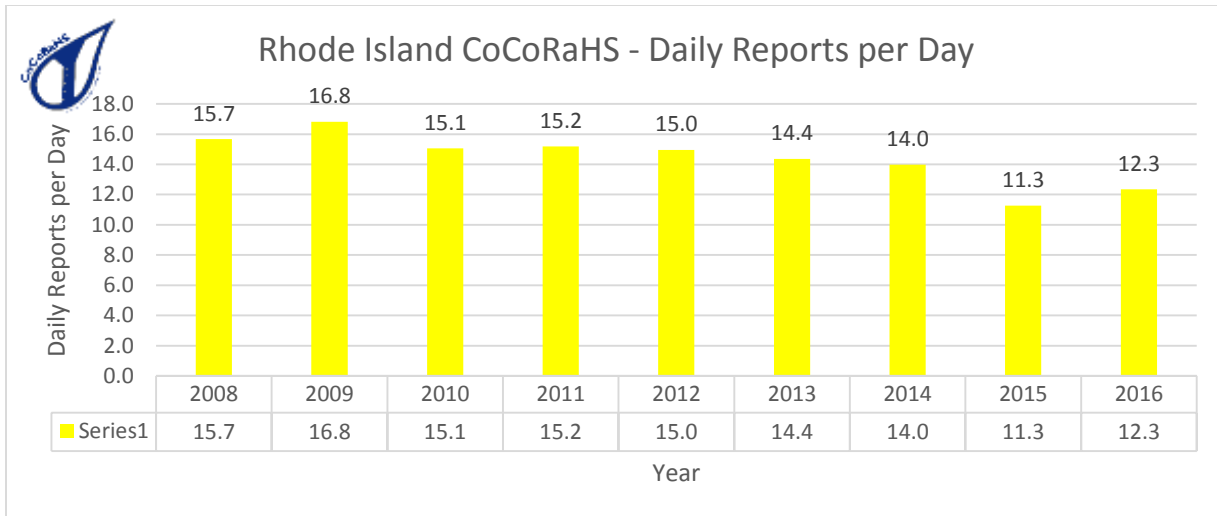
RI-WS-1 Hope Valley 3.7 S  
RI-NW-4 Middletown 1.1 SW  
RI-KN-2 East Greenwich 2.3 ESE  
RI-NW-5 Little Compton 1.7 NW

### **Rhode Island CoCoRaHS**

Comments by Joe DelliCarpini – Science & Operations Officer, NWS Taunton MA

Back in 2007, Henry Reges, National Coordinator of CoCoRaHS (who himself has roots in southern New England) approached me about having Connecticut, Massachusetts, and Rhode Island join the expanding CoCoRaHS network in the eastern U.S. We decided to focus on Rhode Island first, since as a relatively small state that is covered by our NWS office in Taunton, and would be a good “test case” for the rest of the region.

Fortunately we have a long-standing partnership with the Rhode Island Water Resources Board and state Emergency Management Office, so they were a natural fit as partners with our office for CoCoRaHS. We were able to spread the word around the state that we were looking for volunteers to join CoCoRaHS, and were fortunate to have over two dozen observers sign up in the first couple of months. The program expanded from there, and as of this month, there are 106 CoCoRaHS observers in the Ocean State!



## Water Year Review

The Water Year began on October 1, 2015 and will end on September 30, 2016. So that places us 6 months into the Water Year with 6 months left to go.

In the same sorting sequence that the monthly totals appear in each monthly newsletter, those stations that have covered 90% of the days, or 165 days of the possible 183 days between Daily Reports and Multi-Day Reports. Impressive to find 100 stations in this list. It was sad to exclude new observers that started in late October, early November. Keep up the diligent and detailed reporting.

This table is an opportunity to look back at your station, should you need to fill in missing reports. Also, it is an opportunity to see snowfall totals from this past winter and to see how much precip has fallen across our region

Remember the simple guideline to use for our area. 3"-4" of precip / month. 11"-13" of precip / quarter. 22"-26" of precip in a 6 month period. See how your area totals compare.

Station	Location	Precip	Snowfall	Days Covered	County & State
MA-BE-11	Great Barrington 3.0 N	16.16"	9.1"	172	Berkshire MA
MA-BE-3	Stockbridge .2 NNE	17.41"	10.2"	180	Berkshire MA
MA-BE-10	Pittsfield 2.0 NNW	21.19"	10.8"	179	Berkshire MA
MA-BE-4	Becket 5.6 SSW	20.79"	25.4"	183	Berkshire MA
CT-LT-5	Winsted 2.6 NNW	17.07"	13.8"	169	Litchfield CT
CT-LT-9	New Hartford Center 3.2 SW	21.40"	26.8"	183	Litchfield CT
CT-FR-9	Brookfield 3.3 SSE	20.59"	21.7"	183	Fairfield CT
CT-FR-20	Westport 2.5 ENE	19.38"	0.0"	175	Fairfield CT
CT-FR-23	Shelton 1.3 W	24.03"	30.9"	183	Fairfield CT
CT-NH-16	Milford 1.8 E	19.99"	33.7"	177	New Haven CT
CT-NH-14	Prospect 1.9 ENE	22.68"	24.4"	182	New Haven CT
MA-FR-10	Conway 0.9 SW	24.09"	14.4"	183	Franklin MA
MA-HS-7	Plainfield 2.2 SW	22.96"	18.8"	180	Hampshire MA
MA-HS-2	Westhampton 1.8 SW	19.57"	19.6"	166	Hampshire MA
MA-HS-8	Williamsburg 1.2 WSW	22.10"	18.8"	176	Hampshire MA
MA-HS-10	Northampton 1.6 NE	18.91"	12.2"	183	Hampshire MA
MA-HD-13	Springfield 4.1 W	17.08"	8.9"	175	Hampden MA
CT-HR-24	Collinsville 0.9 NW	22.52"	24.3"	182	Hartford CT



CT-HR-23	Southington 0.9 SSE	19.40"	0.0"	180	Hartford CT
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CT-HR-18	Berlin 2.4 SSE	22.54"	29.3"	183	Hartford CT
CT-HR-11	West Hartford 2.7 SSE	20.17"	24.5"	183	Hartford CT
CT-HR-6	Wethersfield 1.2 WSW	18.83"	22.5"	183	Hartford CT
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CT-HR-7	Central Manchester 2.7 SW	20.50"	22.5"	170	Hartford CT
CT-TL-2	Staffordville 0.4 NNW	22.88"	34.6"	183	Tolland CT
CT-MD-5	Westbrook Center 1.1 N	20.00"	6.0"	168	Middlesex CT
MA-WR-8	Fitchburg 1.6 SSW	19.52"	13.7"	176	Worcester MA
MA-WR-13	Leominster 1.5 S	20.12"	28.2"	183	Worcester MA
MA-WR-28	Berlin 1.3 WSW	20.43"	25.2"	181	Worcester MA
MA-WR-18	Northborough 0.6 SSE	19.30"	20.2"	174	Worcester MA
MA-WR-1	Milford 2.3 NNW	22.38"	33.7"	181	Worcester MA
CT-WN-6	Dayville 2.0 ENE	21.63"	29.9"	181	Windham CT
CT-WN-8	Moosup 1.7 NE	20.38"	32.7"	183	Windham CT
CT-WN-4	East Killingly 1.3 SW	21.74"	29.3"	183	Windham CT
CT-NL-5	Oakdale 2.6 WNW	28.60"	23.2"	168	New London CT
RI-PR-33	Greenville 0.7 NNW	24.40"	36.4"	183	Providence RI
RI-PR-17	Cranston 4.1 E	23.42"	28.5"	179	Providence RI
RI-PR-35	Cumberland Hill 3.7 E	21.47"	11.6"	176	Providence RI
RI-PR-32	Providence 2.3 NE	22.27"	23.1"	183	Providence RI
RI-KN-2	East Greenwich 2.3 ESE	22.81"	26.2"	181	Kent RI
RI-WS-25	Rockville 0.4 E	28.92"	33.5"	180	Washington RI
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MA-BR-14	Dartmouth 2.5 SSW	24.14"	9.1"	183	Bristol MA
MA-MD-47	West Townsend 0.5 W	20.90"	25.7"	183	Middlesex MA
MA-MD-36	Townsend 2.6 S	18.67"	0.0"	166	Middlesex MA
MA-MD-12	Acton 1.3 SW	21.92"	32.5"	183	Middlesex MA
MA-MD-51	Maynard 0.7 ESE	21.28"	29.0"	183	Middlesex MA

MA-MD-42	Holliston 0.8 S	22.56"	31.0"	181	Middlesex MA
MA-MD-52	Lexington 0.6 SW	21.53"	21.4"	182	Middlesex MA
MA-MD-45	Wilmington 1.5 NE	20.44"	25.2"	183	Middlesex MA
MA-MD-7	Winchester 0.7 SE	22.14"	25.9"	183	Middlesex MA
MA-MD-44	Medford 1.2 W	22.83"	23.9"	183	Middlesex MA
MA-MD-43	Somerville 0.8 SSE	20.18"	20.6"	175	Middlesex MA
MA-ES-3	Haverhill 3.6 WNW	21.96"	33.3"	181	Essex MA
MA-ES-4	Groveland 0.5 WSW	18.30"	34.9"	182	Essex MA
MA-ES-12	Boxford 2.4 S	21.66"	34.8"	183	Essex MA
MA-ES-1	Salisbury 3.7 NW	22.46"	33.0"	172	Essex MA
MA-ES-2	Beverly 2.8 NW	21.84"	21.9"	180	Essex MA
MA-ES-8	Marblehead 0.8 SW	21.82"	24.4"	177	Essex MA
MA-SF-4	Brighton 0.5 W	22.14"	27.0"	177	Suffolk MA
MA-SF-10	Chelsea 0.8 N	25.51"	32.6"	180	Suffolk MA
MA-SF-2	Winthrop 0.2 N	21.97"	29.5"	178	Suffolk MA
MA-NF-16	Bellingham 4.7 S	22.00"	8.5"	182	Norfolk MA
MA-NF-11	Millis 2.0 SW	18.70"	28.8"	182	Norfolk MA
MA-NF-3	Franklin 0.7 NE	22.96"	25.0"	180	Norfolk MA
MA-NF-1	Norwood 1.3 NW	22.79"	29.2"	183	Norfolk MA
MA-NF-5	Weymouth 0.5 NW	24.68"	31.5"	181	Norfolk MA
MA-PL-12	East Bridgewater 1.7 WNW	22.33"	31.1"	172	Plymouth MA
MA-PL-15	Abington 1.2 NNE	19.46"	33.1"	180	Plymouth MA
MA-PL-6	Middleborough 5.5 E	28.29"	34.2"	172	Plymouth MA
MA-PL-18	Pembroke 1.7 ENE	25.93"	27.8"	183	Plymouth MA
MA-PL-5	Kingston 3.3 WNW	28.85"	42.7"	181	Plymouth MA
MA-BA-8	Falmouth 1.8 WSW	27.87"	25.0"	176	Barnstable MA
MA-BA-14	North Falmouth 0.5 ENE	27.40"	27.3"	170	Barnstable MA
MA-BA-13	Falmouth 0.6 NNW	30.76"	29.7"	175	Barnstable MA
MA-BA-17	East Falmouth 1.2 WNW	24.12"	15.8"	168	Barnstable MA
MA-BA-3	Falmouth 3.0 E	31.60"	37.4"	183	Barnstable MA
MA-BA-18	Waquoit 0.6 SSW	31.22"	34.7"	183	Barnstable MA
MA-BA-45	Sandwich 0.9 NNE	27.30"	14.8"	182	Barnstable MA
MA-BA-22	Yarmouth 0.9 NNW	30.45"	0.0"	169	Barnstable MA
MA-BA-1	Yarmouth 2.3 SSE	33.05"	28.3"	174	Barnstable MA
MA-BA-33	Brewster 1.5 ESE	30.48"	31.0"	183	Barnstable MA
MA-BA-27	Wellfleet 0.7 NW	27.15"	26.4"	180	Barnstable MA
MA-BA-36	Harwich 2.6 ENE	33.70"	20.0"	182	Barnstable MA
MA-BA-12	Orleans 1.1 E	32.57"	14.7"	183	Barnstable MA
MA-BA-30	Eastham 0.6 SW	32.74"	27.4"	181	Barnstable MA
MA-DK-5	West Tisbury 2.9 N	32.79"	39.5"	176	Dukes MA
MA-NT-1	Nantucket 3.8 WNW	29.91"	0.0"	183	Nantucket MA

## **Patriots Day**

The holiday in Massachusetts, commemorating the Battles of Lexington and Concord, occurs this month. Robert Newman lit two lanterns and climbed 154 steps to place them in the belfry of the Old North Church. Paul Revere and William Dawes took separate routes as they rode on horseback to warn of the British advance.

A year later, Thomas Jefferson drafted the Declaration of Independence. John Hancock signed his name to the Declaration so large that King George would have little difficulty seeing it without his spectacles.

Jefferson was a weather buff. He carried a thermometer with him to Philadelphia and recorded the temperature several times a day.

As CoCoRaHS observers, we do not have lanterns, horses, or large signatures. Our records may not be as meticulous as Jefferson's, although Jefferson would be impressed with our Water Year Summaries.

Like the Patriots during our American Revolution, we are all volunteers bounded together by a common cause. We are part of a citizen-science project that warns others in real time with Significant Weather Reports and Hail Reports. No lanterns to light or 154 steps to climb.

We measure and report rain, hail and snow on a daily basis through the internet for so many to see and to make good use of. No need to get on horseback to get the word out or to send two riders to make certain of it.

We can make relevant and insightful comments with any of our reports so that any King, quality inspector, River or Weather Forecaster can see and read easily. Probably without wearing their spectacles!

As a part of Southern New England's CoCoRaHS, with whatever Patriot in mind that best fits your personality, press or click "Submit" on your reports with pride in our area's Patriot past.

Thank you for all that you do for CoCoRaHS, whether in the past, present and in the days to come. Press or click "Submit" with pride!