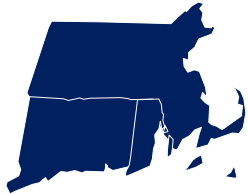




Southern



New England

December 2017

Another strong month of reporting in November. Records were broken for a 30 day month for all 3 of our states, many of them exceeded our reporting in the 31 day month of August. Our average Daily Reports per Day broke a record this month as well. A record amount of snowfall reports, and it hasn't started to snow much yet. Wait until you see the record long list of stations. Be proud of your achievements this month.

Before everyone settles in for the winter, understand that each and everyone's participation is valued and is important. Whether it's one Daily Report or Daily Reports for one month and longer, your Snow Reports, your Comments, your real-time Significant Weather Report, can verify what has occurred or is occurring and influence decisions that are made from it.

Starting off, we would like your feedback on our "Grand List" page. Next, snowflakes started to fly, so before the season gets too far along, we want to make sure we all know how to report when we get a Trace of snow. A little humor and some pause as we report decimals. Monthly Zeros is a tool to use to look at your reports for the month and to fill in zeros quickly. As we get deeper into the winter season, and the mixed bag of precipitation that comes with it, there is an app for that, an app to report in real time what type of precipitation you are getting.

Let's begin!

The “Grand” List

Congratulations to these observers from our three states who have recently passed milestones of 1000 Daily Reports.

1000 Daily Reports

MA-MD-47 West Townsend 0.5 W
CT-HR-24 Collinsville 0.9 NW

We need your feedback on this section. We would like to know which Daily Reporting Milestones we should recognize. Please reply to Joe or Matt with your thoughts.

Thoughts include,

- a) Adding multiples of 500 Daily Reports
- b) Adding 200 & 600 Daily Report milestones before the 1000 mark.
- c) Choice b) and Choice a) additional for after 1000 Daily Reports
- d) Open to additional ideas

Earlier this year, there was a change made to the website, which showed observers their Daily Report count, along with their past 7 Daily Reports, appearing after they submitted a Daily Report. You, the observers that use the website, are seeing your Daily Report counts like never before.

Before this year, Coordinators were limited with their knowledge what Daily Report counts were for the observers, without the time consuming inquiries in the database. Now, Coordinators can see those Daily Report counts much easier, making this task easier for recognizing Reporting milestones.

What we do not want to occur in your experiences as observers, who see their Daily Report counts on the website, and see this recognition in the Newsletter, react with “I’ll never make it to...” “That is so far off...” “It is going to take me years to get that far...” “I’m not doing this anymore.”

We ask for your feedback on this section. We will begin with something added and different for January’s newsletter. Thank you.

Traces of Snow

Snowflakes have started to fly. While the snow season is still new, let's refresh ourselves as to how to accurately report snow that does not accumulate to 0.1" You need a good coating of snow for it to measure 0.1". Anything less, a few flakes of snow, a light dusting of snow, should be reported as "T" for Trace for both New Snow, and with no other precipitation, as Total Precip also.

Please refer to this guideline so that you can accurately report a Trace of Snow. It is important that you report this accurately.

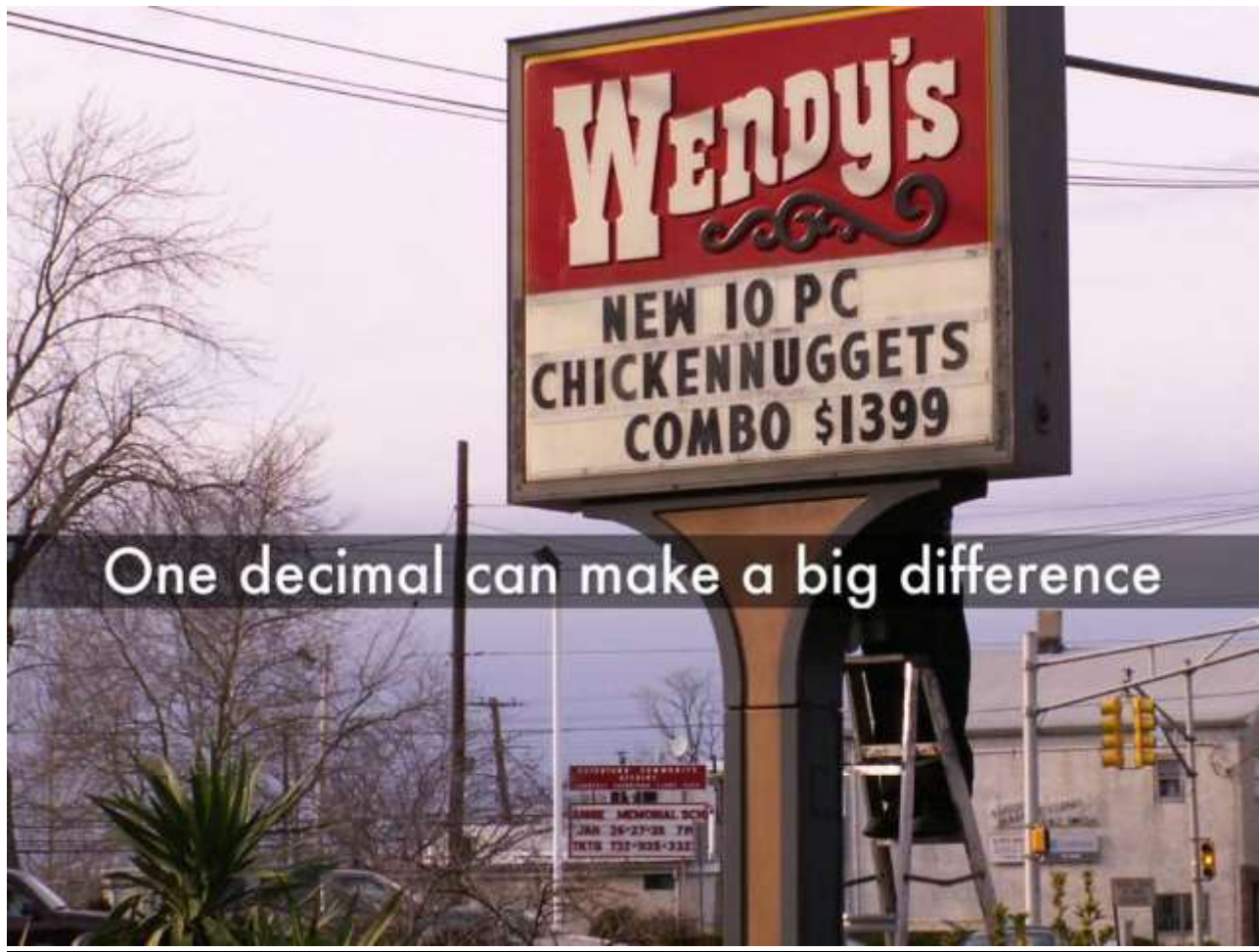
Daily Precipitation Report	
Station Number:	Station Name:
Observation Date	12/29/2016 7:00 AM
Submitted	12/29/2016 7:22 AM
Total Precip Amount	T ← 1
Notes	Snow flakes, snow shower around 10am yesterday. ← 2
Taken at registered location	Yes
Snow Information	
New Snow Depth	T ← 3
New Snow Water Equivalent	T ← 4
Total Snow Depth	0.0 in. ← 5
Total Snow Water Equivalent	0.00 in.

- 1) Trace of Precip occurred.
- 2) Comment that clarifies and verifies is helpful
- 3) Trace of New Snow. This verifies that snowflakes fell.
- 4) The water equivalent was a trace.
- 5) Snow Depth report verifies that there is no snow on the ground or change this to "T" is snow coverage average is less than 0.5" or some other non-zero value to the nearest 0.5"

Traces of Snow can occur 15-30 times per season. As snowflakes are precipitation, you can keep your own count.

Reporting with Decimals

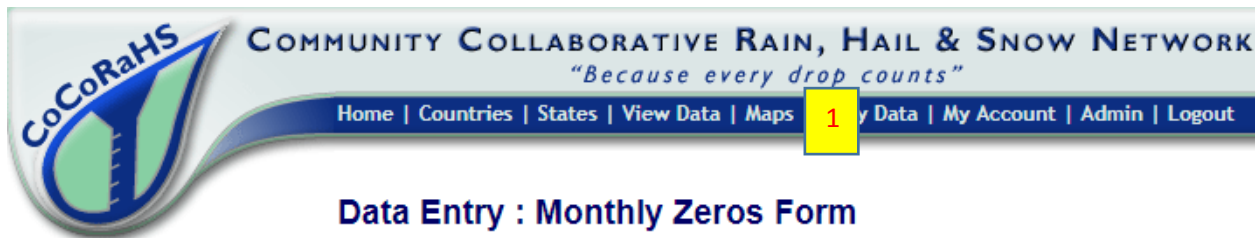
Our group of observers are very good with reporting precipitation values. As we get into the middle of snow season, please slow down your pace of data entry, avoid false zeros, and look at your report before submitting. As is often said, ***Mistakes happen with reporting, not with measuring.***



Yes, one decimal can make a big difference. Make the correct difference with your reporting this season and in all of the other seasons as well.

Monthly Zeros

We would always like to see more stations in the list of stations that appears in this newsletter. This tool should help. For those times during the week, or at the end of the month, when you want to be certain that you filled in all of your missing reports, is a feature called Monthly Zeros.



Data Entry : Monthly Zeros Form

Enter New Reports

- [Daily Precipitation](#)
- [Multi-Day Accumulation](#)
- [Hail](#)
- [Significant Weather](#)
- [Monthly Zeros](#)
- [Condition Monitoring Report](#)
- [Soil Moisture](#)

FROST Reports

- [Optics](#)
- [Frost](#)
- [Snowflake](#)
- [Thunder](#)

List/Edit Reports

- [Daily Precipitation](#)
- [Multi-Day Accumulation](#)
- [Hail](#)
- [Hail by Station](#)

Monthly Zeros Submit Reset

Station Number : Station Name :

< **November 2017** >

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	1	2	3	4
			Precip: 0	Precip: 0	Precip: 0	Multi-Day Report
5	6	7	8	9	10	11
Multi-Day Report	Precip: 0.12	Precip: 0.04	Precip: 0.65	Precip: 0.01	Precip: 0	Precip: 0
12	13	14	15	16	17	18
Precip: 0.01	Precip: 0	Precip: 0.03	Precip: 0.01	Precip: 0.28	Multi-Day Report	Multi-Day Report
19	20	21	22	23	24	25
Precip: 0.45	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip	Precip: 0.31	Precip: 0.06	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip
26	27	28	29	30	1	2
<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip	<input type="checkbox"/> 0.0 Precip		
3	4	5	6	7	8	9


After you login to your CoCoRaHS account. By the numbers.

- 1- Click on My Data.
- 2- Click on Monthly Zeros.
- 3- Click on the check boxes to assign a zero
- 4- Click on Submit. The important step.
- 5- Click on the < to a previous month. Click on the > a later month.

Accuracy matters. Zeros only. Avoid “date shifting”, seeing this calendar and thinking that “Oh, yeah, that day was a 0 day”, but it should have reported for the following day.


Detail and Summary for November 2017

From the National Weather Service (NWS) Climate sites for Nov 2017.



October 2017

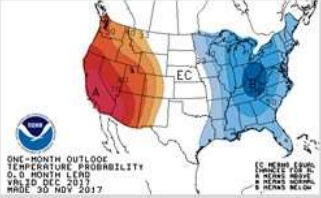
Regional Precipitation Summary



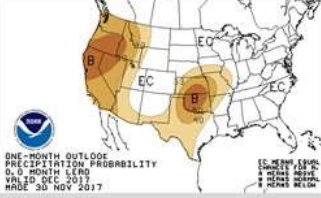
Location	Station ID	Nov 2017 Precip	Nov departure from normal	Sep-Oct-Nov Precip	3 month departure from normal	Jun-Nov Precip	6 month departure from normal	Dec-Nov Precip	12 month departure from normal
Pittsfield MA	PSF	1.41"	-2.52"	8.70"	-3.90"	20.71"	-4.63"	42.51"	-2.87"
Bridgeport CT	BDR	1.87"	-1.52"	10.97"	0.46"	19.72"	-1.82"	42.99"	0.25"
Hartford CT	BDL	1.04"	-2.85"	12.06"	-0.08"	24.90"	0.30"	45.90"	0.05"
Worcester MA	ORH	1.79"	-2.49"	13.13"	0.24"	21.34"	-3.68"	46.22"	-1.86"
Providence RI	PVD	2.94"	-1.57"	12.23"	-0.13"	21.41"	-1.48"	49.57"	2.39"
Boston MA	BOS	1.80"	-2.19"	9.67"	-1.70"	20.13"	-1.70"	44.21"	0.44"

December 2017 Outlook

Air Temperature



Precipitation



A = Above normal, B = Below normal,
EC = Equal chances of above/below normal

November Highlights

- Record average of 262 Daily Reports per Day.
- Record reporting for a 30 day month in our 3 states.
- Measurable snow from 11 MA and 6 CT reports.

The two large rain events in late October seem a distant memory, but one that punctuates a long dry period from the present time back to Labor Day, 4th of July and Memorial Day.

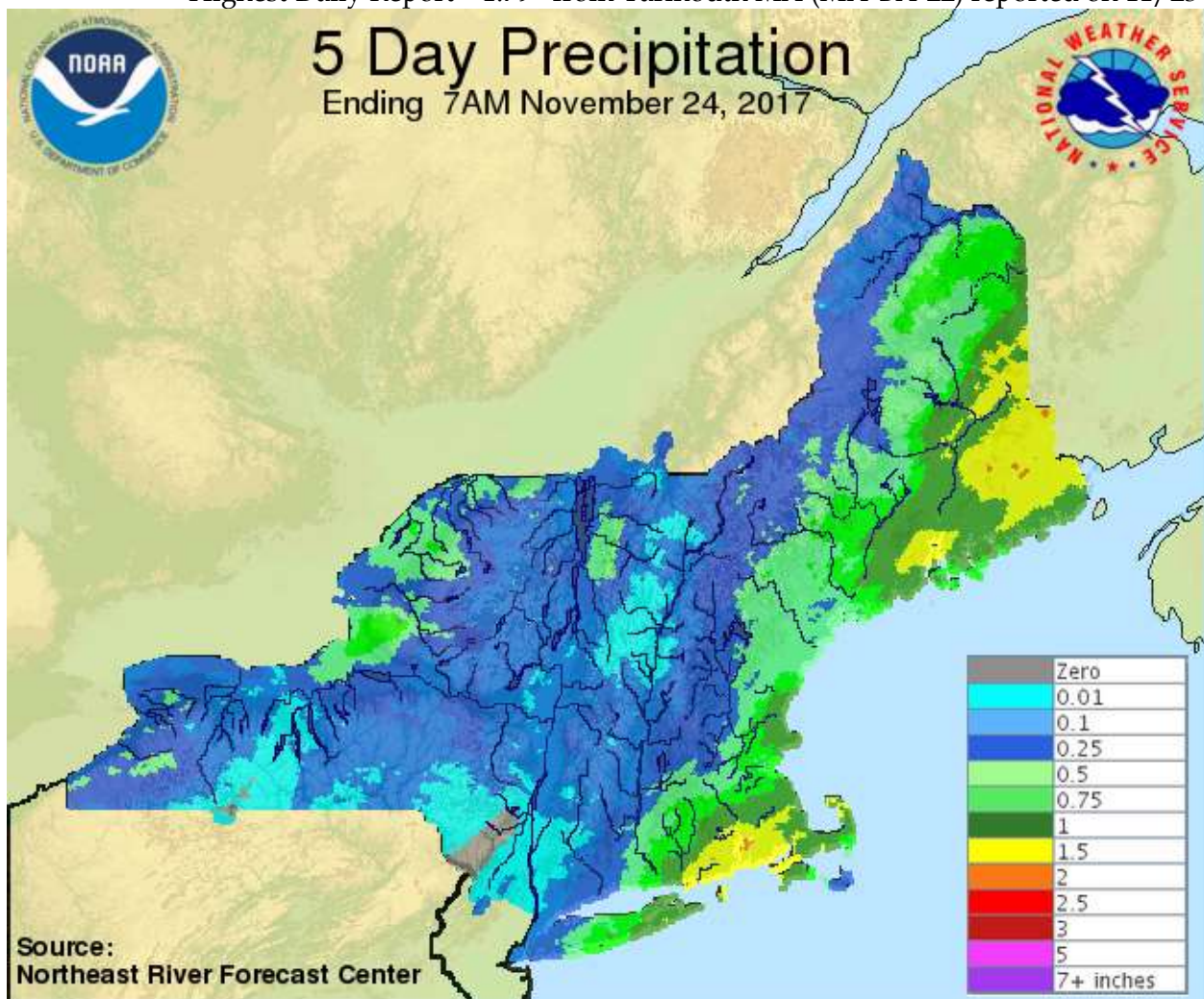
The significant rain event of the month came before Thanksgiving, to areas around Narragansett Bay and its surrounding areas. That one event made the difference whether you received a small amount or slightly less than normal amount of precipitation for the month.

Accumulating snow arrived in western parts of our area. 2 small events reported on the 8th and the 20th should remind us to continue preparations for measuring and reporting snow.

Take in this next section of your reports with appreciation of your efforts.

From your reports for November 2017

Observers reporting	323
Reported all 30 days	161
Completed by Multi-Day Reports	52
Missing 1 or 2 reports	32
Daily Reports	7861
Zero Reports	4531
Non-Zero Reports	3330
Daily Comments	1580
Multi-Day Reports	180
Condition Monitoring Reports	27
Significant Weather Reports	5
Snowfall Reports	4433
Snow Depth Reports	2107
SWE Reports	1172
Highest Daily Report	1.79" from Yarmouth MA (MA-BA-22) reported on 11/23



This is a remarkable achievement, 214 stations that covered all days in the month, without overlaps of the beginning or end of the month. All river basins represented. 6 pages full of stations by Watershed.

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

Watershed	Watershed Name	Station	Station Name	Precip
01060003	Piscataqua-Salmon Falls			
0106000310	Hampton River - Frontal Atlantic Ocean	MA-ES-1	Salisbury 3.7 NW	1.29"
01070004	Nashua			
0107000401	North Nashua River	MA-WR-44	Westminster 0.6 WSW	1.65"
0107000401	North Nashua River	MA-WR-52	Fitchburg 2.3 N	1.04"
0107000401	North Nashua River	MA-WR-22	Fitchburg 2.0 NNE	1.38"
0107000402	Headwaters Nashua River	MA-WR-64	Sterling 3.7 WNW	1.60"
0107000402	Headwaters Nashua River	MA-WR-56	Sterling 4.3 NW	1.84"
0107000402	Headwaters Nashua River	MA-WR-66	Lunenburg 0.7 WSW	0.86"
0107000402	Headwaters Nashua River	MA-WR-53	Clinton 0.2 E	1.39"
0107000402	Headwaters Nashua River	MA-MD-108	Shirley 0.3 WSW	1.62"
0107000402	Headwaters Nashua River	MA-MD-25	Ayer 0.1 SW	1.51"
0107000403	Squannacook River	MA-MD-47	West Townsend 0.5 W	1.11"
0107000403	Squannacook River	MA-MD-36	Townsend 2.6 S	1.20"
01070005	Concord			
0107000501	Sudbury River	MA-MD-89	Sudbury 3.6 W	2.18"
0107000501	Sudbury River	MA-MD-88	Wayland 2.1 SSE	1.96"
0107000502	Concord River	MA-WR-30	Shrewsbury 1.6 NNE	1.71"
0107000502	Concord River	MA-WR-28	Berlin 1.3 WSW	1.42"
0107000502	Concord River	MA-WR-42	Northborough 2.3 N	1.52"
0107000502	Concord River	MA-WR-55	Harvard 2.1 S	1.25"
0107000502	Concord River	MA-MD-83	Boxborough 1.4 SSE	1.69"
0107000502	Concord River	MA-MD-12	Acton 1.3 SW	1.78"
0107000502	Concord River	MA-MD-51	Maynard 0.7 ESE	2.04"
0107000502	Concord River	MA-MD-53	Acton 4.0 ENE	1.97"
0107000502	Concord River	MA-MD-62	Chelmsford 1.2 E	1.78"
01070006	Merrimack River			
0107000611	Spicket River	MA-ES-38	Methuen 1.6 NNE	1.83"
0107000612	Stony Brook - Merrimack River	MA-MD-104	Littleton 2.8 NNW	1.58"
0107000612	Stony Brook - Merrimack River	MA-MD-105	Littleton 0.9 WSW	1.85"
0107000612	Stony Brook - Merrimack River	MA-MD-93	Westford 1.5 SSW	1.59"
0107000613	Shawsheen River	MA-MD-52	Lexington 0.6 SW	1.76"
0107000613	Shawsheen River	MA-MD-96	Lexington 0.3 NE	1.23"

0107000614	Powwow River - Merrimack River	MA-ES-3	Haverhill 3.6 WNW	2.05"
0107000614	Powwow River - Merrimack River	MA-ES-20	Haverhill 0.7 N	2.05"
0107000614	Powwow River - Merrimack River	MA-ES-4	Groveland 0.5 WSW	1.78"
0107000614	Powwow River - Merrimack River	MA-ES-27	Amesbury 1.2 ENE	1.40"
01080201	Middle Connecticut			
0108020106	Manhan River - Connecticut River	MA-HS-2	Westhampton 1.8 SW	0.96"
0108020106	Manhan River - Connecticut River	MA-HS-8	Williamsburg 1.2 WSW	0.93"
0108020106	Manhan River - Connecticut River	MA-HS-26	Easthampton 0.5 SW	0.50"
0108020106	Manhan River - Connecticut River	MA-FR-12	Sunderland 1.3 SE	1.06"
0108020107	Batchelor Brook - Connecticut River	MA-HD-13	Springfield 4.1 W	1.06"
01080202	Miller			
0108020202	Lower Millers River	MA-WR-40	Gardner 1.4 SSW	1.63"
01080203	Deerfield			
0108020305	Lower Deerfield River	MA-FR-17	Buckland 1.8 ESE	1.21"
0108020305	Lower Deerfield River	MA-FR-13	Conway 2.9 NW	1.27"
0108020305	Lower Deerfield River	MA-FR-10	Conway 0.9 SW	1.12"
01080204	Chicopee			
0108020403	Quaboag River	MA-WR-63	Rutland 3.1 SW	1.70"
0108020404	Chicopee River	MA-HD-25	Ludlow 2.3 SW	1.16"
01080205	Lower Connecticut			
0108020501	Mill River - Connecticut River	CT-HR-5	Enfield 1.5 SE	1.23"
0108020502	Scantic River	CT-TL-15	Central Somers 0.3 N	1.48"
0108020503	Park River	CT-HR-39	Farmington 1.6 SW	1.26"
0108020503	Park River	CT-HR-49	West Hartford 1.1 W	1.09"
0108020503	Park River	CT-HR-11	West Hartford 2.7 SSE	1.15"
0108020503	Park River	CT-HR-19	Newington 0.8 ENE	1.46"
0108020504	Hockanum River	CT-HR-52	Central Manchester 0.8 N	0.96"
0108020504	Hockanum River	CT-TL-19	Vernon 2.8 N	1.26"
0108020505	Roaring Brook - Connecticut River	CT-HR-6	Wethersfield 1.2 WSW	1.25"
0108020505	Roaring Brook - Connecticut River	CT-HR-51	Wethersfield 1.3 S	1.50"
0108020505	Roaring Brook - Connecticut River	CT-HR-22	East Hartford 1.3 E	1.08"
0108020505	Roaring Brook - Connecticut River	CT-HR-7	Central Manchester 2.7 SW	1.39"
0108020505	Roaring Brook - Connecticut River	CT-HR-40	Glastonbury Center 4.0 ENE	1.84"
0108020506	Mattabeset River	CT-HR-15	Southington 3.0 E	1.55"
01080206	Westfield			
0108020601	Headwaters Westfield River	MA-HS-14	Plainfield 2.4 ESE	1.19"
0108020603	Outlet Westfield River	MA-HD-17	Southwick 2.5 WSW	0.75"
01080207	Farmington			
0108020701	Still River	CT-LT-15	Colebrook 1.0 NE	1.33"
0108020702	West Branch Farmington River	MA-BE-4	Becket 5.6 SSW	1.41"
0108020704	Headwaters Farmington River	CT-HR-24	Collinsville 0.9 NW	1.03"

0108020704	Headwaters Farmington River	CT-HR-28	North Canton 0.8 SSW	1.23"
0108020705	Salmon Brook	CT-HR-8	North Granby 1.3 ENE	0.86"
01090001	Charles			
0109000101	Plum Island Sound - Frontal Atlantic Ocean	MA-ES-24	Newburyport 0.8 SW	1.79"
0109000102	Ipswich River	MA-MD-85	Wilmington 2.2 WNW	2.13"
0109000102	Ipswich River	MA-MD-45	Wilmington 1.5 NE	2.20"
0109000102	Ipswich River	MA-MD-69	North Reading 1.5 NW	2.34"
0109000102	Ipswich River	MA-ES-12	Boxford 2.4 S	2.28"
0109000102	Ipswich River	MA-ES-2	Beverly 2.8 NW	2.29"
0109000103	Essex River - Frontal Atlantic Ocean	MA-ES-41	Danvers 0.8 ESE	2.01"
0109000103	Essex River - Frontal Atlantic Ocean	MA-ES-43	Gloucester 2.1 NW	1.88"
0109000103	Essex River - Frontal Atlantic Ocean	MA-ES-22	Rockport 1.0 E	2.02"
0109000104	Saugus River - Frontal Broad Sound	MA-MD-81	Wakefield 0.5 NNW	1.91"
0109000104	Saugus River - Frontal Broad Sound	MA-SF-2	Winthrop 0.2 N	1.85"
0109000104	Saugus River - Frontal Broad Sound	MA-ES-8	Marblehead 0.8 SW	2.13"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-54	Belmont 0.3 SE	2.03"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-7	Winchester 0.7 SE	1.75"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-44	Medford 1.2 W	1.79"
0109000105	Mystic River - Frontal Boston Harbor	MA-MD-11	Cambridge 0.9 NNW	1.82"
0109000106	Upper Charles River	MA-WR-1	Milford 2.3 NNW	2.39"
0109000106	Upper Charles River	MA-MD-106	Holliston 2.4 W	2.27"
0109000106	Upper Charles River	MA-MD-55	Holliston 0.7 W	2.32"
0109000106	Upper Charles River	MA-MD-42	Holliston 0.8 S	2.05"
0109000106	Upper Charles River	MA-NF-11	Millis 2.0 SW	2.27"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-80	Lincoln 1.5 SW	2.17"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-NF-35	Wellesley 0.1 W	1.87"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-71	Newton 2.2 NNW	1.66"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-MD-74	Somerville 0.7 SSE	1.82"
0109000107	Lower Charles River - Frontal Boston Harbor	MA-SF-1	Boston 0.5 WSW	1.62"
0109000108	Neponset River - Frontal Boston Harbor	MA-NF-1	Norwood 1.3 NW	2.00"
0109000109	Whitmans Pond - Frontal Boston Harbor	MA-NF-32	Quincy 1.8 WSW	1.81"
0109000109	Whitmans Pond - Frontal Boston Harbor	MA-NF-5	Weymouth 0.5 NW	1.85"
0109000109	Whitmans Pond - Frontal Boston Harbor	MA-PL-36	Hingham 0.8 ESE	2.26"
01090002	Cape Cod			
0109000202	Cape Cod	MA-BA-8	Falmouth 1.8 WSW	2.95"
0109000202	Cape Cod	MA-BA-2	Falmouth 3.1 NNW	2.91"
0109000202	Cape Cod	MA-BA-57	Falmouth 5.7 N	2.99"
0109000202	Cape Cod	MA-BA-14	North Falmouth 0.5 ENE	3.07"
0109000202	Cape Cod	MA-BA-13	Falmouth 0.6 NNW	2.83"
0109000202	Cape Cod	MA-BA-3	Falmouth 3.0 E	2.56"
0109000202	Cape Cod	MA-BA-18	Waquoit 0.6 SSW	2.79"

0109000202	Cape Cod	MA-BA-47	Mashpee 2.4 WSW	2.82"
0109000202	Cape Cod	MA-BA-45	Sandwich 0.9 NNE	2.99"
0109000202	Cape Cod	MA-BA-10	East Sandwich 2.3 SE	2.96"
0109000202	Cape Cod	MA-BA-59	Barnstable 3.6 W	3.01"
0109000202	Cape Cod	MA-BA-22	Yarmouth 0.9 NNW	3.11"
0109000202	Cape Cod	MA-BA-1	Yarmouth 2.3 SSE	2.58"
0109000202	Cape Cod	MA-BA-33	Brewster 1.5 ESE	3.03"
0109000202	Cape Cod	MA-BA-52	Truro 0.8 E	2.68"
0109000202	Cape Cod	MA-BA-27	Wellfleet 0.7 NW	2.97"
0109000202	Cape Cod	MA-BA-36	Harwich 2.6 ENE	2.51"
0109000202	Cape Cod	MA-BA-37	Orleans 0.8 W	3.05"
0109000202	Cape Cod	MA-BA-51	Orleans 3.0 S	2.28"
0109000202	Cape Cod	MA-BA-12	Orleans 1.1 E	2.51"
0109000202	Cape Cod	MA-BA-30	Eastham 0.6 SW	2.96"
0109000202	Cape Cod	MA-BA-65	Chatham 0.2 SSE	1.84"
0109000203	Mattapoisett River - Frontal Buzzards Bay	MA-PL-19	Rochester 1.2 NNW	3.63"
0109000204	Paskamanset River - Frontal Buzzards Bay	MA-BR-14	Dartmouth 2.5 SSW	3.72"
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-5	Little Compton 1.7 NW	3.61"
0109000205	Sakonnet Point - Frontal Rhode Island Sound	RI-NW-7	Little Compton 0.6 E	3.74"
0109000206	Elizabeth Islands - Marthas Vineyard	MA-DK-5	West Tisbury 2.9 N	3.32"
01090003	Blackstone			
0109000301	Upper Blackstone River	MA-WR-43	Leicester 2.4 ESE	1.69"
0109000301	Upper Blackstone River	MA-WR-62	Uxbridge 2.7 WSW	2.44"
0109000302	Lower Blackstone River	RI-PR-28	North Smithfield 0.7 SE	2.37"
0109000302	Lower Blackstone River	RI-PR-45	Manville 0.4 WSW	2.17"
0109000302	Lower Blackstone River	MA-NF-26	Bellingham 2.4 S	2.52"
0109000302	Lower Blackstone River	MA-NF-16	Bellingham 4.7 S	2.31"
0109000302	Lower Blackstone River	RI-PR-55	Cumberland Hill 3.3 NE	2.11"
01090004	Narragansett			
0109000401	Upper Taunton River	MA-BR-30	Taunton 3.9 N	2.68"
0109000401	Upper Taunton River	MA-NF-31	Stoughton 1.2 E	2.24"
0109000401	Upper Taunton River	MA-PL-22	East Bridgewater 0.3 WSW	2.63"
0109000401	Upper Taunton River	MA-PL-15	Abington 1.2 NNE	2.17"
0109000401	Upper Taunton River	MA-PL-23	Pembroke 2.8 SW	2.93"
0109000402	Middle Taunton River	MA-PL-17	Plympton 0.9 NNE	2.47"
0109000403	Threemile River	MA-NF-19	Foxborough 1.8 SSW	2.40"
0109000403	Threemile River	MA-BR-33	Taunton 2.4 W	3.09"
0109000403	Threemile River	MA-BR-9	Taunton 2.6 NW	2.96"
0109000404	Ten Mile River	MA-BR-17	North Attleboro 0.8 E	1.86"
0109000404	Ten Mile River	MA-BR-23	Attleboro 0.9 ENE	2.19"
0109000405	Wonnasquatucket River-Moshassuck River	RI-PR-33	Greenville 0.7 NNW	2.29"

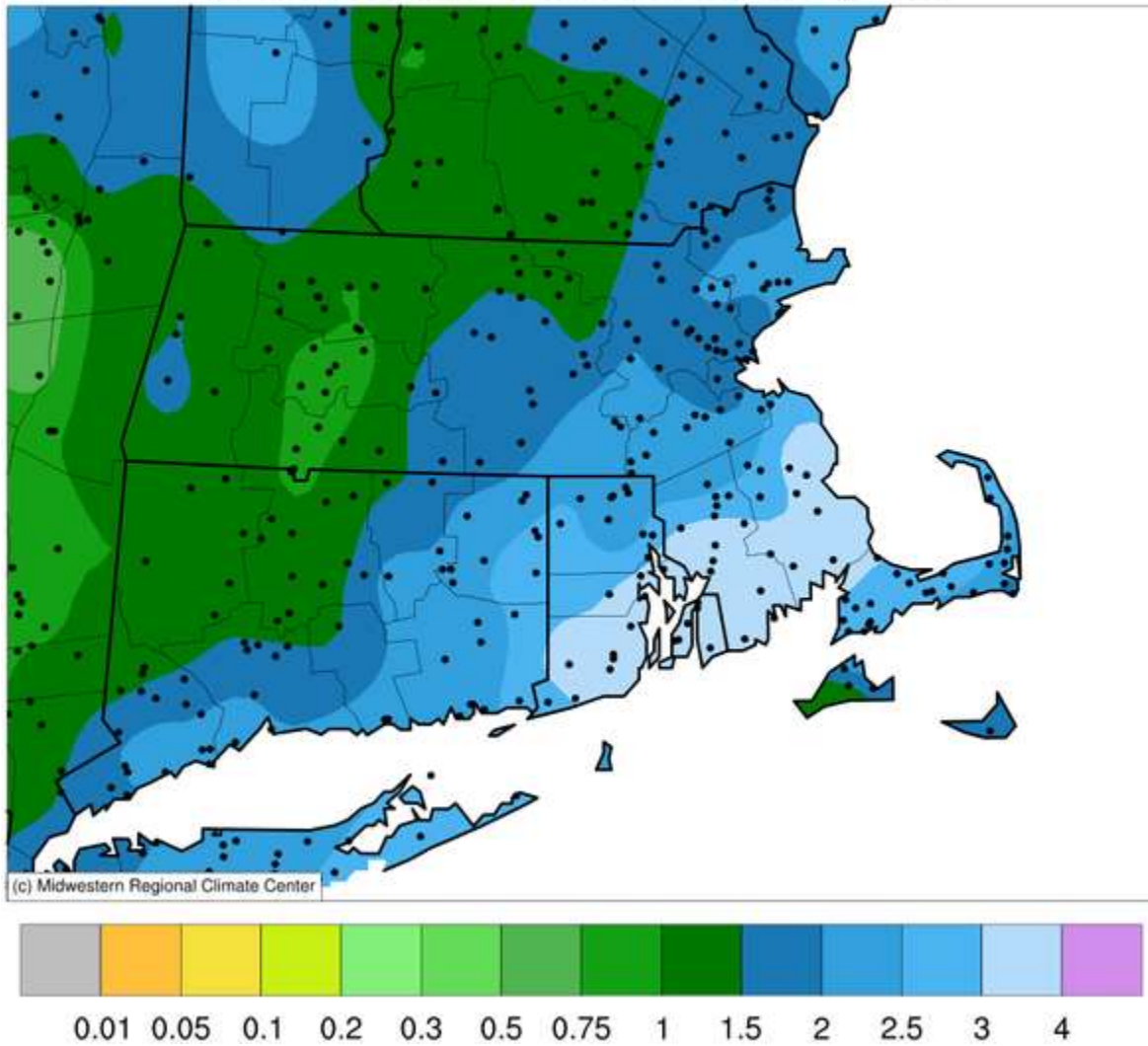
0109000405	Woonasquatucket River-Moshassuck River	RI-PR-51	North Smithfield 0.6 S	2.39"
0109000405	Woonasquatucket River-Moshassuck River	RI-PR-53	Providence 1.7 N	1.83"
0109000406	Pawtuxet River	RI-PR-44	Cranston 4.2 ENE	2.62"
0109000407	Palmer River	MA-BR-2	Rehoboth 2.1 N	3.07"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-3	Norton 1.8 NNE	2.38"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-16	Somerset 0.4 SSE	4.12"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-19	Somerset 2.0 NNE	3.96"
0109000408	Lower Taunton River - Frontal Mount Hope Bay	MA-BR-8	Dighton 1.1 WSW	3.44"
0109000409	Narragansett Bay	RI-WS-31	Kingston 7.5 NNE	3.67"
0109000409	Narragansett Bay	RI-KN-2	East Greenwich 2.3 ESE	3.82"
0109000409	Narragansett Bay	RI-PR-32	Providence 2.3 NE	2.58"
0109000409	Narragansett Bay	RI-BR-5	Barrington 1.3 WNW	3.15"
0109000409	Narragansett Bay	RI-NW-4	Middletown 1.1 SW	2.40"
0109000409	Narragansett Bay	RI-NW-11	Tiverton 0.8 SSW	3.53"
01090005	Pawcatuck-Wood			
0109000501	Wood River	RI-WS-1	Hope Valley 3.7 S	3.36"
0109000502	Upper Pawcatuck River	RI-WS-32	Kingston 6.9 NNW	3.70"
0109000502	Upper Pawcatuck River	RI-WS-37	Kingston 2.4 SW	3.59"
0109000502	Upper Pawcatuck River	RI-WS-40	West Warwick 7.7 S	3.70"
0109000503	Lower Pawcatuck River	RI-WS-35	Westerly 1.0 SW	2.86"
0109000504	Frontal Block Island Sound	RI-WS-36	Charlestown 3.0 WSW	2.84"
01100001	Quinebaug			
0110000101	Upper Quinebaug River	MA-HD-16	Wales 0.4 SSW	1.83"
0110000103	Fivemile River	CT-WN-6	Dayville 2.0 ENE	2.55"
0110000103	Fivemile River	CT-WN-4	East Killingly 1.3 SW	2.38"
0110000105	Mossup River	CT-WN-8	Moosup 1.7 NE	2.79"
0110000106	Pachaug River	CT-NL-21	Griswold 0.9 N	2.41"
01100002	Shetucket			
0110000201	Willimantic River	CT-TL-18	Hebron 5.3 NW	2.26"
0110000201	Willimantic River	CT-TL-2	Staffordville 0.4 NNW	1.42"
0110000202	Natchaug River	CT-TL-4	Mansfield Center 1.9 SW	2.33"
0110000202	Natchaug River	CT-WN-12	Eastford 2.0 W	2.25"
0110000203	Shetucket River	CT-NL-10	Norwich 2.5 NNE	2.62"
01100003	Thames			
0110000302	Thames River-Frontal New London Harbor	CT-NL-5	Oakdale 2.6 WNW	2.94"
0110000302	Thames River-Frontal New London Harbor	CT-NL-6	New London 1.0 NNW	2.51"
0110000302	Thames River-Frontal New London Harbor	CT-NL-8	Uncasville-Oxoboxo Valley 1.6 ENE	2.76"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-29	East Lyme 0.5 SW	2.60"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-22	Central Waterford 2.7 SSW	2.44"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-19	Mystic 0.9 W	2.57"
0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-24	Stonington 1.4 NNW	2.91"

0110000303	Mystic River - Frontal Fishers Island Sound	CT-NL-18	Stonington 0.5 NNE	2.95"
01100004	Quinnipiac			
0110000401	Quinnipiac River	CT-NH-14	Prospect 1.9 ENE	1.48"
0110000401	Quinnipiac River	CT-NH-30	Cheshire Village 2.2 SE	1.58"
0110000401	Quinnipiac River	CT-HR-23	Southington 0.9 SSE	1.39"
0110000401	Quinnipiac River	CT-NH-44	Wallingford Center 1.9 WNW	1.77"
0110000401	Quinnipiac River	CT-NH-43	Wallingford Center 3.3 NNW	1.56"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-NH-41	Madison Center 1.6 W	2.14"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-MD-15	Clinton 3.5 N	2.56"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-MD-5	Westbrook Center 1.1 N	2.23"
0110000402	Hammonasset River - Frontal Long Island Sound	CT-MD-11	Westbrook Center 1.5 NE	2.30"
0110000403	Mill River - Frontal Long Island Sound	CT-NH-16	Milford 1.8 E	2.54"
0110000403	Mill River - Frontal Long Island Sound	CT-NH-29	Hamden 3.0 WSW	2.11"
0110000403	Mill River - Frontal Long Island Sound	CT-NH-38	Wallingford Center 2.3 WNW	1.85"
01100005	Housatonic			
0110000501	Headwaters Housatonic River	MA-BE-3	Stockbridge .2 NNE	1.74"
0110000501	Headwaters Housatonic River	MA-BE-10	Pittsfield 2.0 NNW	1.66"
0110000504	Macedonia Brook - Housatonic River	CT-LT-20	Warren 2.4 WNW	0.98"
0110000508	Still River - Housatonic River	CT-FR-43	Bethel 0.5 E	1.56"
0110000508	Still River - Housatonic River	CT-FR-41	Bethel 3.5 NNE	1.24"
0110000508	Still River - Housatonic River	CT-FR-9	Brookfield 3.3 SSE	1.23"
0110000510	Eightmile Brook - Housatonic River	CT-FR-44	Newtown 4.3 E	1.50"
0110000512	Outlet Naugatuck River	CT-LT-14	Watertown 0.5 S	1.31"
0110000512	Outlet Naugatuck River	CT-NH-45	Naugatuck 1.7 NNE	1.65"
0110000512	Outlet Naugatuck River	CT-NH-22	Prospect 0.5 SW	1.54"
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-42	Monroe 0.1 SE	2.01"
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-23	Shelton 1.3 W	1.97"
0110000513	Housatonic River - Frontal Long Island Sound	CT-FR-46	Stratford 0.2 ESE	2.15"
01100006	Saugatuck			
0110000601	Saugatuck River - Frontal Long Island Sound	CT-FR-31	Newtown 4.6 SSW	1.84"
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-29	Ridgefield 1.9 SSE	2.03"
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-3	New Canaan 1.9 ENE	2.07"
0110000602	Norwalk River - Frontal Norwalk Harbor	CT-FR-25	Norwalk 2.9 NNW	1.97"
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-20	Westport 2.5 ENE	2.35"
0110000603	Pequonnock River - Frontal Long Island Sound	CT-FR-32	Monroe 0.8 W	2.15"
0110000604	Mianus River-Rippowam River	CT-FR-12	Stamford 3.3 NW	1.87"
0110000604	Mianus River-Rippowam River	CT-FR-50	Darien 2.8 NW	2.00"
0110000604	Mianus River-Rippowam River	CT-FR-35	Darien 1.8 ENE	1.75"
02030203	Long Island Sound			
0203020300	Long Island Sound	NY-SF-114	Fishers Island 0.5 NE	3.07"

A pleasant change has occurred in this map of reports from last month. More dots! More dots from your station's reporting having not missed any reports. It does not appear as an instantaneous flip-of-the-switch. There are other databases that look at CoCoRaHS reports. After months and years of proving yourselves, some other database has noticed.

Accumulated Precipitation (in)

November 01, 2017 to November 30, 2017



Visual Data from your reports

November 2017 as a calendar. A count of your Daily Reports by Date. Red colors are for the highest counts. Blue/Green color for the lowest counts.

Our average was a record 262 Daily Reports per day. Multi-Day Reporting is understood. We would like to minimize those that miss a day or days reporting.

November 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 272	2 268	3 265	4 253
5 254	6 273	7 275	8 277	9 266	10 257	11 249
12 248	13 255	14 281	15 270	16 276	17 283	18 253
19 268	20 264	21 261	22 255	23 251	24 240	25 236
26 247	27 256	28 273	29 267	30 268		

A continuation of what has been emphasized in months before. Snowfall and Snow Depth and Total SWE reports as many as you safely, possibly, and accurately can.

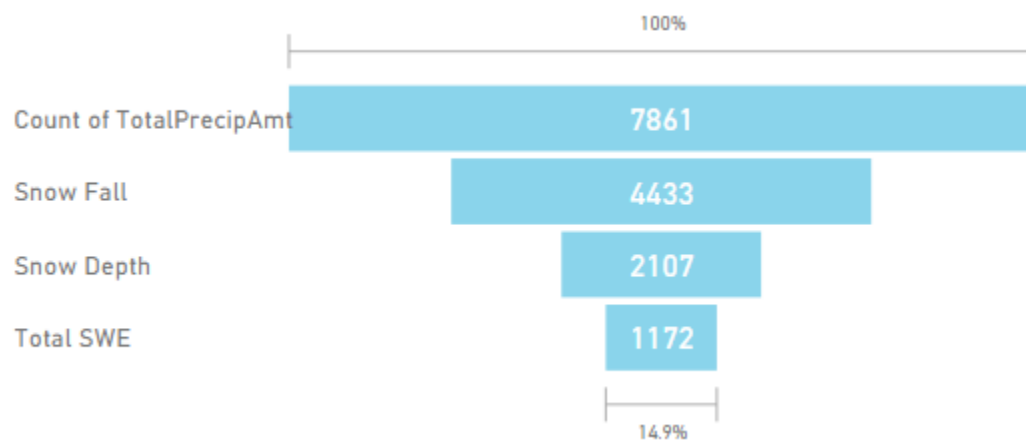
The strange phenomenon has been noticed that when there is zero precip, it is more frequently followed with zeros for the snow values. When there is precip to report, the zeros do not come with the snow values.

Aware that snow season is upon us and the enthusiasm for zeros in the snow section should be tempered with healthy dose of being accurate over reporting zeros.

Look over your snow section with your Daily Report. If there is zero snow and/or snow depth, there are no zeros like snow zeros, regardless of rain or sunshine.

If you can measure the snow depth, make your best average to the nearest 0.5". Less than 0.5" of snow depth, or that patchy, scattered, blotchy snow cover, should be reported as a "T" for Trace.

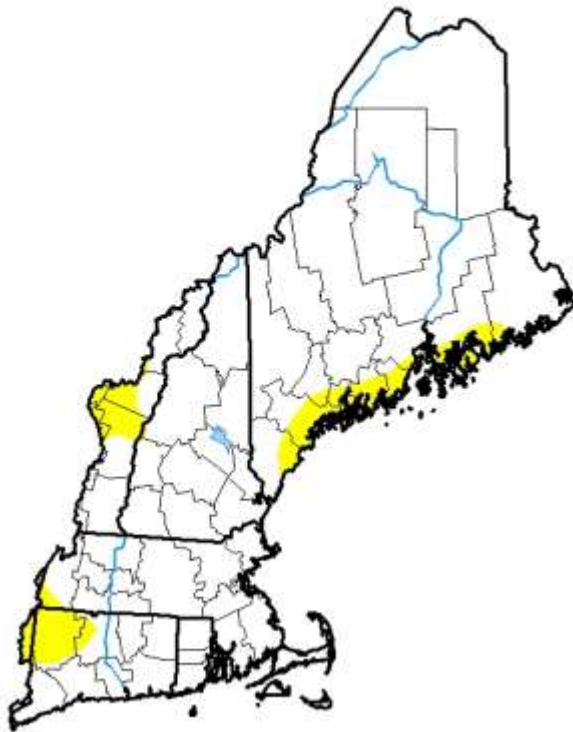
Do look over the [Snow Guide](#) and study the reporting scenarios. When the snow becomes more widespread, please be accurate with your reports.



From the Drought Monitor.

D0 has returned to Litchfield County CT. November was dry for most of our 3 states. We will all see how December turns out. Every drop counts and zeros do too!

U.S. Drought Monitor New England Watershed



December 5, 2017
(Released Thursday, Dec. 7, 2017)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	91.75	8.25	0.00	0.00	0.00	0.00
Last Week <small>11-28-2017</small>	94.15	5.85	0.00	0.00	0.00	0.00
3 Months Ago <small>09-05-2017</small>	58.17	26.15	15.68	0.00	0.00	0.00
Start of Calendar Year <small>01-01-2017</small>	14.64	11.89	49.23	19.61	4.63	0.00
Start of Water Year <small>09-26-2017</small>	60.75	25.08	13.36	0.00	0.00	0.00
One Year Ago <small>12-06-2016</small>	11.51	9.92	33.38	34.99	10.20	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

David Simeral
Western Regional Climate Center



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

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

Real time reporting with mPING

If you always wanted to submit a real time report, whether you are home or travelling, to say that the rain has changed to sleet or snow, to say that there is dense fog, there is an app for that for your GPS enabled mobile devices.

If you have had this app for years, and have not updated this app since early Year 2016, you need to update this app to this latest version.

For both Apple and Android devices, where you download apps, search for mPING, which stands for “Meteorological Phenomena Identification Near the Ground.”

mPING is a research project being conducted by NOAA’s National Severe Storms Laboratory (NSSL) in Norman, Oklahoma. They are trying to make our weather radar and weather forecasts better from real time reports being submitted from GPS enabled mobile devices.

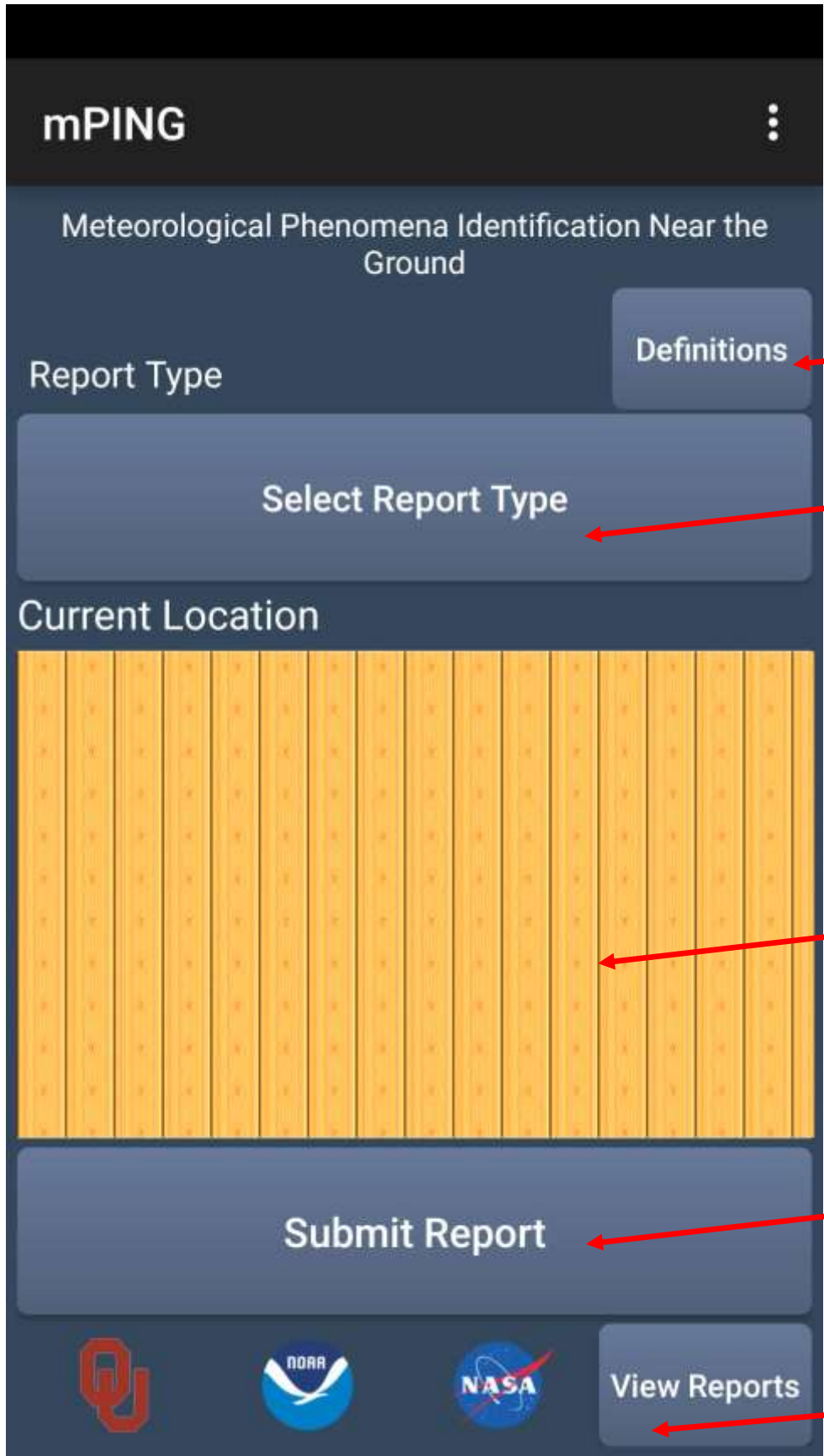
As winter precipitation occurs, and that fine line that always occurs in our area with sleet and snow mixing with and changing to rain, your reports from mPING can help verify or clarify what is being seen with weather radar.

Understand that weather radar is not perfect. The earth is round and the radar beam is straight. The radar may not see what is occurring near your ground. mPING gives you another opportunity to report the “ground truth”

And none of this replaces your Daily, Multi-Day, or Significant Weather Reports. All of this with mPING is supplemental to your efforts with CoCoRaHS.

More can be found at <https://mping.nssl.noaa.gov/>

Let’s look at some print screen as to how this all looks and works.



Learn about what all of the precipitation types mean.

Be accurate. Select what it is you are reporting.

GPS must be turned on. Map of your present location will appear here.

As observers, we know this. Check over your report and then press submit!

Map will display a loop of reports. Each symbol and color means something.

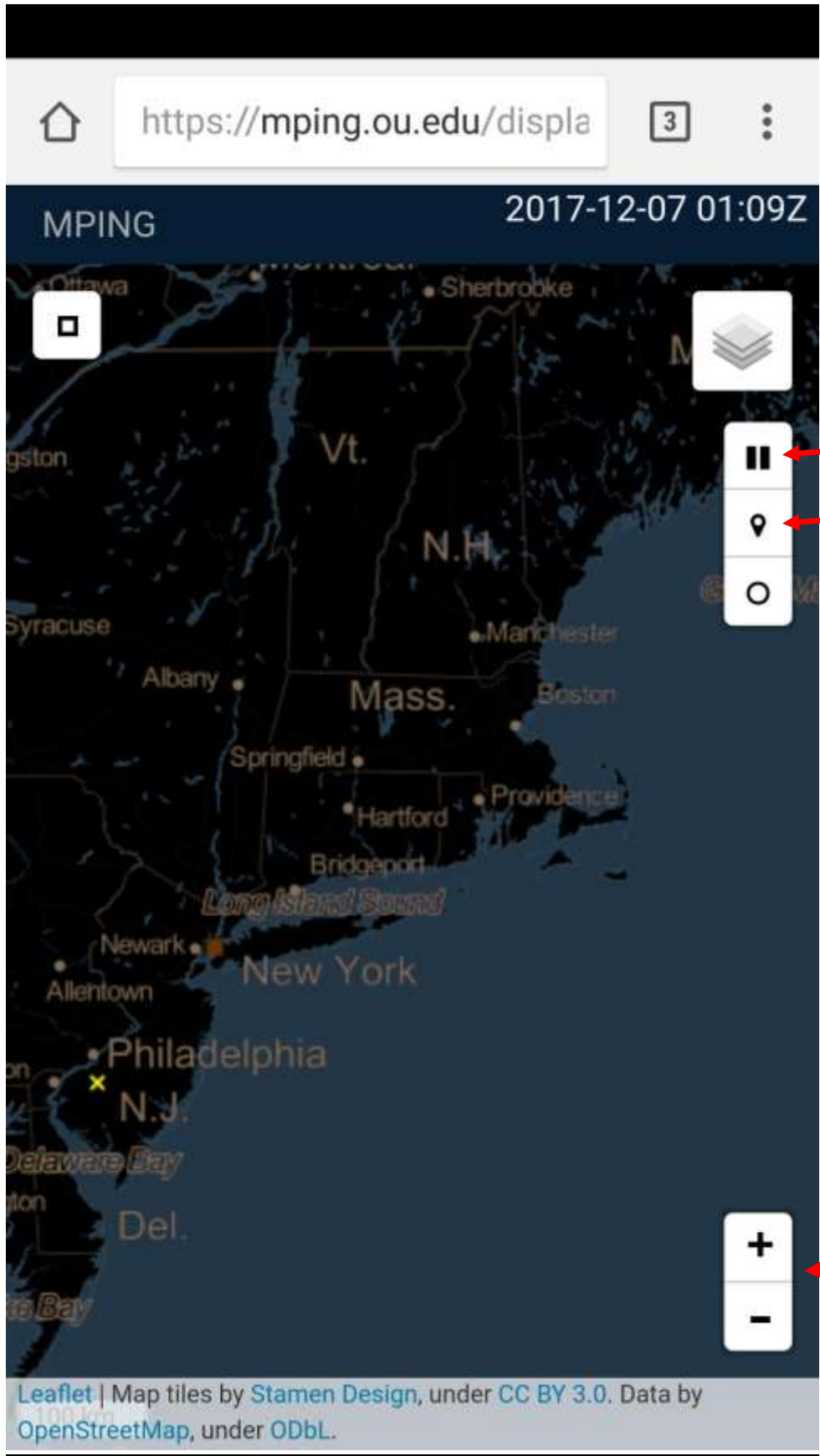
- ✓ Test
- ✓ None
- ✓ Rain/Snow
- ✓ Hail
- ✓ Wind Damage
- ✓ Tornado
- ✓ Flood
- ✓ Mudslide
- ✓ Reduced Visibility

Select a Report Type from here. As CoCoRaHS observers, there is one or two choices that we are drawn to. There are others.

Test
 None
 Rain/Snow

Rain
 Freezing Rain
 Drizzle
 Freezing Drizzle
 Ice Pellets/Sleet
 Snow and/or Graupel
 Mixed Rain and Snow
 Mixed Ice Pellets and Snow
 Mixed Freezing Rain and Ice Pellets
 Mixed Rain and Ice Pellets

Under Rain/Snow, pick one that best describes what you are experiencing at the present time.



Map of Reports. With your mobile device, the map will zoom to your location.

For web browsers, the URL is <https://mping.ou.edu/display>

Stop and start the loop of reports.

The words that explain the colors and the symbols behind the reports

Zoom in and Zoom out this map of reports

Wrap up

Winter cold has arrived so keep watch over your funnel and inner cylinder should rainfall occur with freezing temperatures afterwards. You may need to measure, write down, and empty your gauge before your regular observation time.

If you are headed to a warmer locale this winter, please send a message to your Coordinator, so we don't get too concerned of your absence. While you are away, we hope that you think of us as often as we will think of you.

If you are looking for that something for that someone that has everything, consider buying a rain gauge. They can join our fine citizen-science network later on.

Or buy yourself a 2nd gauge, or outer cylinder, for changing out the gauge with winter's changing precipitation.

Not to promote the merchandising aspect of the season, but one new product may come during this month to weatheryourway.com

This is a unique time of the year. Take in the stillness and quiet that the early mornings and evenings have during this time of year. The Winter Solstice occurs on 11:28am on Thursday December 21. Daylight will increase when we get into January.

Our best wishes to you all, however you spend your year-end holidays.

Thank you for all that you do for CoCoRaHS, whether in the past, present and in the days to come