

A Southern New England Cooperative Weather Observer Newsletter

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B91s, B91s, B91s!

Can you guess what this section will be about? Everything you needed to know about B91s is right at your figure tips. In front of the B91 booklet are instructions on how to fill out the form. Like Pink, the latest pop singer sings in her recent hit single, "Who knew?" Well now you know. Please check out these instructions, if for any reason, for recurring training! Recurring training is big business in the military. And for any veterans reading this, you know what I mean.

When it is time for your observation, your observation should go onto one line of the B91. For example if you take your ob at 7 am, your 24 hour max, min & precipitation will all go on one line. Please do not time shift your max temp or precipitation to the previous day, even though it may have occurred then. Remember your 7 am ob is a 24 hour observation. For those time shifters among us (those who shift their max temp and precipitation to the previous day), I will eventually visit your station and explain what I mean.

Even if you are a 5 pm observer, the ob time is a 24 hour snapshot of what occurred

during the past 24 hours – and it all gets recorded on one line.

Here is an example of the correct way to do your ob. It is Thursday November 15th and your ob is at 7 am. During the past 24 hours it rained. The rain occurred on Wednesday, November 14th between 2 pm and 8 pm with a total of 0.25 inches. A max temp of 45 degrees occurred at 2 pm on Wednesday. A min of 32 degrees occurred Thursday morning and the 7 am reading was 35. On Thursday morning, November 15th at 7 am you would jot down the following on the 15th line of the B91:

<u>Max</u>	<u>Min</u>	<u>Ob</u>	<u>Rain</u>	Snow	<u>SD</u>
45	32	35	0.25	0.0	0

Even though the max temp and precipitation occurred the previous day, your 7 am ob on Thursday is a **24** hour total. It is a snap shot of what occurred during the past 24 hours. You can use the remarks section on the 15th to say that the rain occurred the previous day on the 14th. Another way to let folks know when it rained is to utilize the precipitation boxes that are labeled from Midnight to Midnight on the calendar day. You can draw a straight line (-----) through the hours of occurrence. If the time is uncertain. you can draw a wavy line (~~~~) through the hour when precipitation probably occurred. Remember, precipitation times are shown for the **calendar days** on which it actually occurred.

Please refer to the front of the B91 booklet, section 8 for more information on notating when precipitation fell.

0.00 Versus Nothing

A reliable source from the National Climate Data Center has informed me that if you receive nothing, nada, zilch, a big fat zero in your rain can, please record 0.00 instead of nothing at all.

During snow season, if you receive no snow, please record 0.0 inches instead of nothing at all.

What if You Take your Ob at a Different Time Than Scheduled?

No problem! That is why there is a remarks section! Just note in the remarks if you take your ob late or early. Use the remarks section to also indicate any missing obs and why. For example, you may go on vacation for a week and miss a whole week of data. You can use remarks to let us know why data is missing. Sometimes equipment is faulty. Jot this down in remarks too.

Winter Weather

To prepare for the season, this is an excellent time to do a leak test on your standard rain gauge and the inner tube. Pour water into these gauges and check to see if any water leaks out from the seams. Best to sit the gauges on a dry surface while checking for any leaks. If you note any leaks, let me know so I can get a replacement out to you. It is that time of year when snow is the predominant form of precipitation, at least north and west of Boston! This is just a reminder to remove your funnel and inner tube when snow is expected.

Let the snow fall directly into your 8 inch standard rain gauge. When it is time for your observation, if snow has fallen during the past 24 hours, bring the gauge inside and melt down the contents, then pour into the inner tube and measure its contents for water equivalent. If it happens to be snowing during your observation, hopefully you have an extra standard rain gauge to swap out. If you do not have an extra gauge, please let me know and I will get you one!

Included in this mailing is a **Snow Measurement Guide**. Many of you, after years of taking of weather observations, know what to do, but a little *recurring training* never hurt anyone.

Remember that rainfall or melted precipitation is measured in hundredths: Example: 0.23

Snow fall is measured in tenths: Example: 4.7

Snow depth or snow on the ground is measured as a rounded whole number: Example: 5

Please refer to the front of the B91 booklet, section 8a and 8b for more information on measuring liquid and frozen precipitation.

Here is an example of a snow observation. It is Tuesday, November 27th and it has snowed during the past 24 hours. You are a 7 am observer. You note that 2.3 inches of new snow fell. After melting the snow catch from your standard rain gauge, you measure a water equivalent of 0.17 inches. The snow has settled a little and the snow depth on the ground is 1.6 inches.

On your B91 form for Tuesday, November 27th you will note the following in the precipitation fields:

Rain melted	<u>Snow</u>	Snow on Ground
0.17	2.3	2

Last Day of Month

It is now November 30 and in this example you are once again a 7 am observer. Your last observation for this month will be entered on the morning of November 30 with a 24 hour snapshot of the max, min, current temp, rainfall, snowfall, and snow on ground. Once this line is filled out, your form is ready to be mailed!

End of the Month

Please sign your B91 in the lower right hand corner and forward the original to our office. Please send your B91s (and other monthly forms) to me **by the 15th** of the following month (or sooner if you can). I need to have your B91s (and other monthly forms) consolidated, packaged and sent to the National Climate Data Center (NCDC) by the 25th of the month. So if you get your B91s to me by the 15th, that will give me a cushion of 10 days to process and quality control the forms before sending off to NCDC. Thanks for helping me keep your data timely and flowing!



WE Recognition

WE (*The Weather Eye*) of Southern New England thank all of you for your dedication to and interest in weather data collecting. Your daily efforts are much appreciated. You are the eyes and ears of our community and your data is the backbone of our nation's climate history.

Historical Fact: In 1933, a Science Advisory Group apprized President Roosevelt that the work of the volunteer cooperative weather observer network was one of the most extraordinary services ever developed, netting the public more per dollar expended than any other government service in the world. And this is still true today!

Look ahead to the following pages for some sneak peeks at your nonpareil comrades who have earned length of service awards.

Contact Information

Have questions? In need of equipment? Equipment not working? Please call Kimberly Buttrick or William Simpson.

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Gerard G. D'Errico of Maynard, MA receives a 30 year award! Misty, a Walker Fox Hound mix stands beside her master and proudly takes part of this milestone! Gerry's weather station is the Cadillac of the coop network (and so are his B91s)!



Sheri Rood Caron of the Plymouth-Kingston, MA station receives a 15 year award! Edward Caron also received a 15 year award, but is not pictured (sorry!). Plymouth-Kingston is part of the historical climate network with weather data dating back to 1886! Thanks to Sheri and Ed for keeping the data rolling!



Stacey G. Swift, Jr. of North Foster, RI receives a 35 year award! Stacey is the quintessential weather enthusiast with an exemplary history of weather observations. Since taking observations, Stacey has yet to miss an ob! Way to go Stacey!



A shy Deb Cannon of the U Mass Cranberry Experiment Station in East Wareham, MA stands amongst the station's weather equipment. She is saluted for 20 years of weather observations at this cranberry bog site! The East Wareham station has a history of weather data dating back to April of 1912! Thanks to Deb for keeping the legacy going!



Charles Buttrick of Greenville, NH is recognized for 15 years of service as a Cooperative Weather Observer! A man of the land, Charles loves and appreciates what all mother nature delivers. Some Charlie Buttrick farmer weather trivia: When the moon is full and the sky is clear, the next 30 days will be marked by dry weather. A clouded full moon means that the next 30 days will be marked by wet conditions.



The venerable Leo L. DuBois receives a Special Act Award for over 55 years of observing weather at the Bridgewater, MA weather station. Clockwise, the handsome men are as follows: the tall man is Jason Roomes, Leo DuBois proudly holds his award, Bobby Dermody stands tall, and Mr. Bill Simpson smiles for the camera!



Richard H. W. Tracy of Groveland, MA receives a 20 year award! The Groveland weather station is a full station comprised of the standard rain gauge, Cotton Region Shelter with max/min thermometers, a Universal rain gauge and an Evaporation Pan. In addition, Rick's station is complemented by a Davis System. Way to go Rick Tracy, a detective of weather!



The young men above are employees of the Town of Middleboro Water Department. They pose for the camera at a weather site with over 100 years of data! From left to right, George Millett holds a 100 year Institutional Award, Louis Ponte (aka the Big Louson) holds a 10 year length of service award with Mike Bumpus to his left. The building they stand in front of is a pumping station erected in 1885, and the weather data dates back to January of 1887! Thanks to these dashing young men for keeping the records going!



Robert Giard of Rochester, MA (aka New Bedford Water Department Quitticas Water Treatment Plant) receives a 25 year length of service award! Interesting to note: Robert received his 20 year award and pin at the Coop Conference in 2003 at Boston's Museum of Science, afterwhich he made a ring out of the pin! Great idea that may inspire others to do the same!



Thanks to all of You!