Prevailing Winds

MARCH, 2021

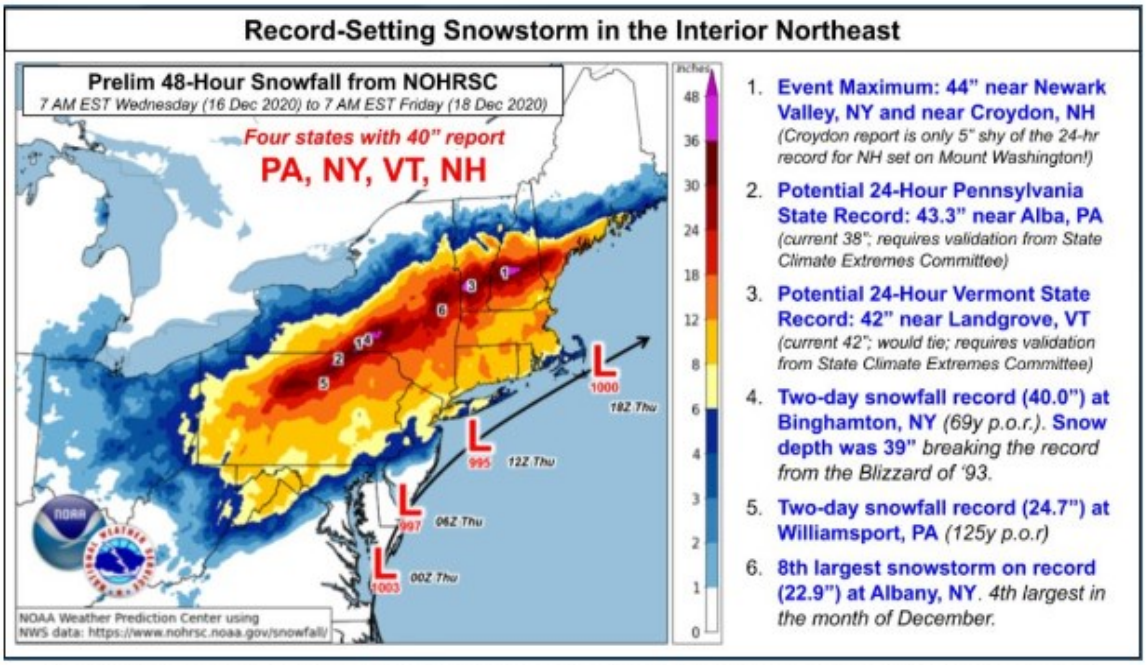
INSIDE THIS ISSUE:

Review of 2020-2021 Winter Storms

by Joe DelliCarpini, Science and Operations Officer, NWS-Boston

The winter of 2020-2021 will be remembered for several significant winter storms, especially in December and from late January through the middle of February. Many locations across interior southern New England ended up with above average snowfall over the meteorological winter months of December, January, and February, while coastal areas received totals closer to average.

Two significant storm systems affected the Northeast in December which helped to erase the drought conditions that began over the summer. The first storm on December 16-17 brought heavy snow to much of the region. Most of southern New England, aside from Cape Cod and the Islands, picked up 8 to 18 inches of snow. The storm passed near Nantucket which typically brings the heaviest snow well inland, and in this case extended from northern Pennsylvania into central New England, where many locations picked up over

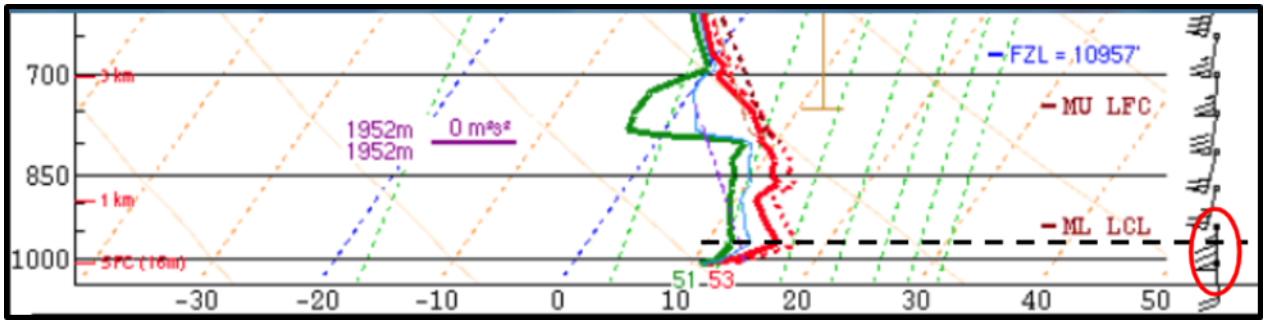


Summary of the December 16-17, 2020 Winter Storm (NWS Weather Prediction Center)

Review of 2020-2021 Winter Storms (continued)

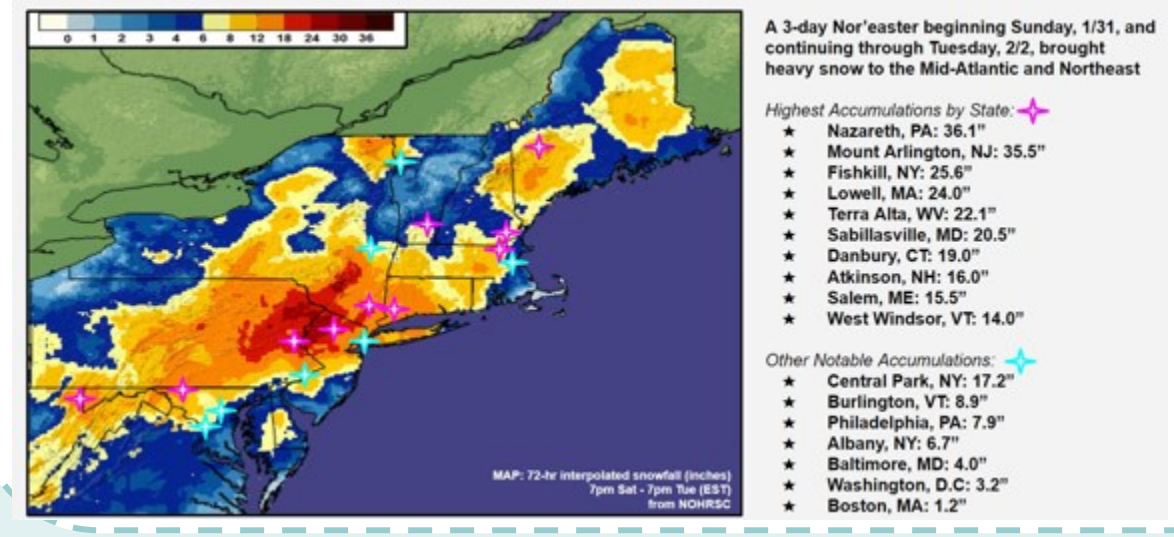
One week later, a second storm tracked through the Great Lakes and brought a surge of milder air into the region from Christmas Eve into Christmas Day. Rainfall of 1 to 3 inches combined with 1 to 2 inches of runoff from melting snow resulted in minor flooding on several rivers throughout the region. Damaging wind gusts were another concern. Temperatures warmed into the 50s and lower 60s, but wind gusts would have been stronger if it had warmed just a few degrees more.

The upper air sounding taken at Chatham, MA on the morning of December 25 is shown below and has been zoomed in on the lowest levels. Note the strong temperature inversion (red) up to the dashed black line, where the temperature is increasing with height. The wind speed at the top of the inversion, which was unable to mix down, was 86 MPH. Had temperatures been a few degrees warmer, that would have helped weaken the inversion and caused a majority of that wind to mix down to the ground!



Since temperatures stayed just cool enough, only a portion of that wind was able to mix down and gusts were limited to between 50 and 60 MPH across most of the region, although a few locations did see gusts over 65 MPH.

After a brief respite through most of January, the weather pattern turned colder and more active with two significant winter storms in early February. The first storm on February 1-2 brought heavy snow to a large portion of the Northeast. Much of southern New England received 8 to 15 inches of snow, with as much as 12 to 20 inches across northeast Massachusetts and western Connecticut, but less than 3 inches of snow fell in coastal areas of eastern Massachusetts where the rain/snow line came into play. Areas to our southwest including the Poconos in Pennsylvania, northern New Jersey, and the Catskills in New York received as much as 3 feet of snow.

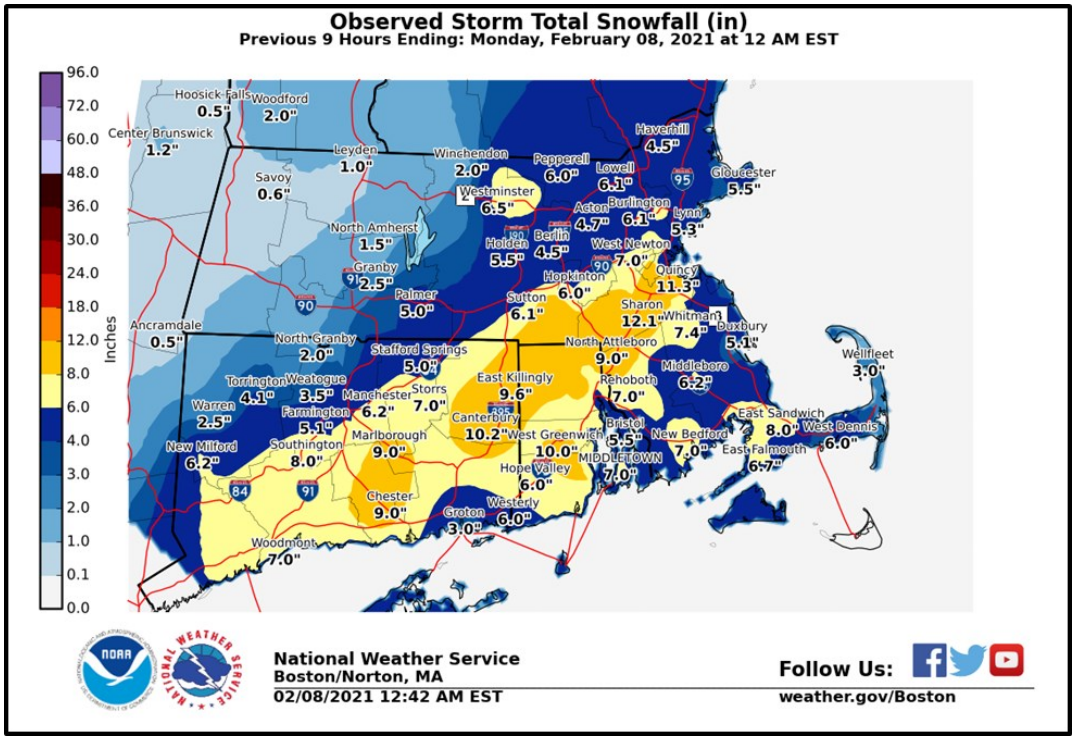


Summary of the February 1-2, 2021 Winter Storm

(NWS Weather Prediction Center)

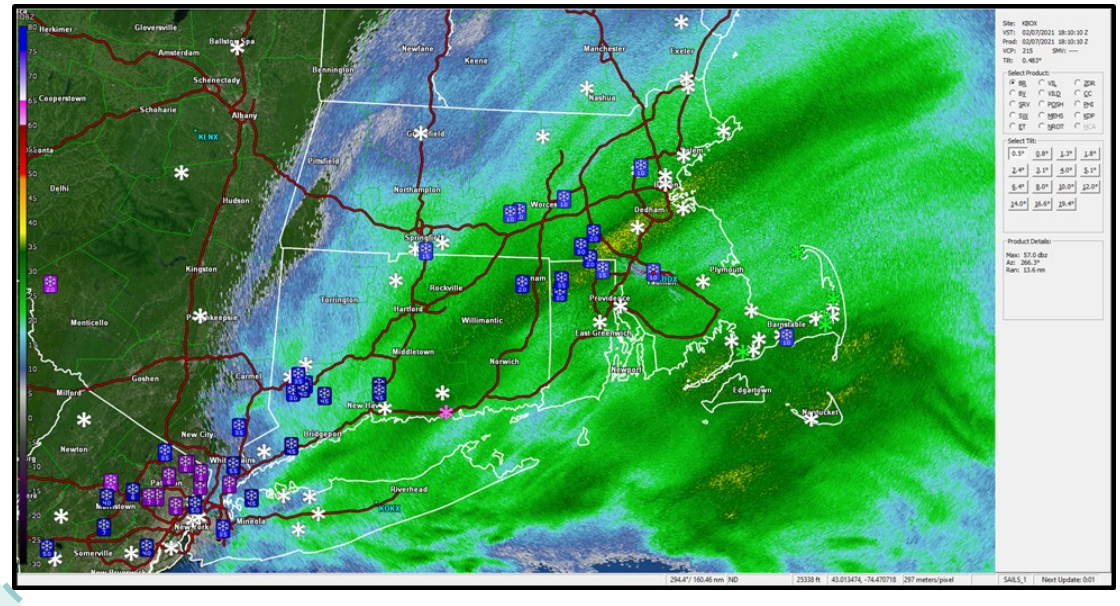
Review of 2020-2021 Winter Storms (continued)

One week later, on February 7, another winter storm produced a band of heavy snow from Connecticut into northern Rhode Island and eastern Massachusetts as it tracked offshore. Many places within this band picked up 8 to 12 inches of snow, most of which fell in just a few hours during the afternoon.



Observed Snowfall Totals: February 7-8, 2021

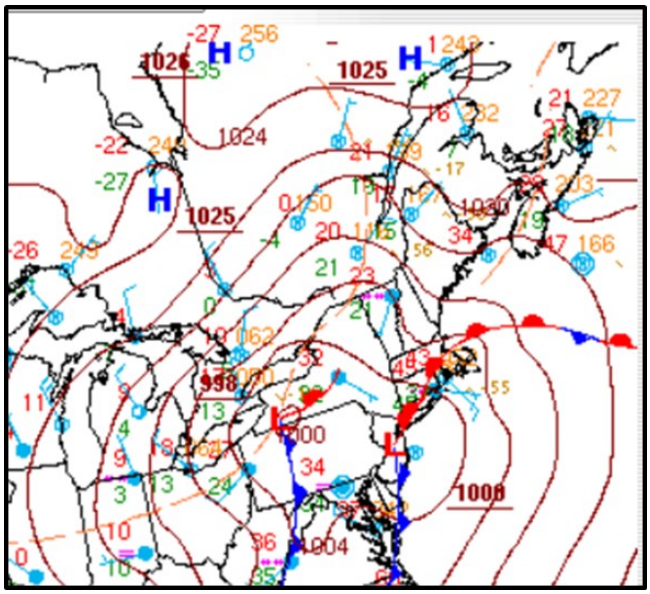
Radar showed a band of heavy snow (dark green and yellow shading) from Connecticut into northern Rhode Island and eastern Massachusetts, where snowfall rates of 2 to 4 inches per hour were observed. Many locations within this band picked up more than 8 inches of snow in just a few hours.



Radar image showing the band of heavy snow from CT into northern RI and eastern MA

Review of 2020-2021 Winter Storms (continued)

Our stretch of active wintry weather continued into the middle of February when many areas saw minor icing, even near the coast. Low pressure tracked through the eastern Great Lakes, which typically means a “warmer” storm for us (mainly rain) but a weaker secondary low formed over New Jersey. This helped keep the cold air locked in near the ground as winds remained light from the north or northeast.

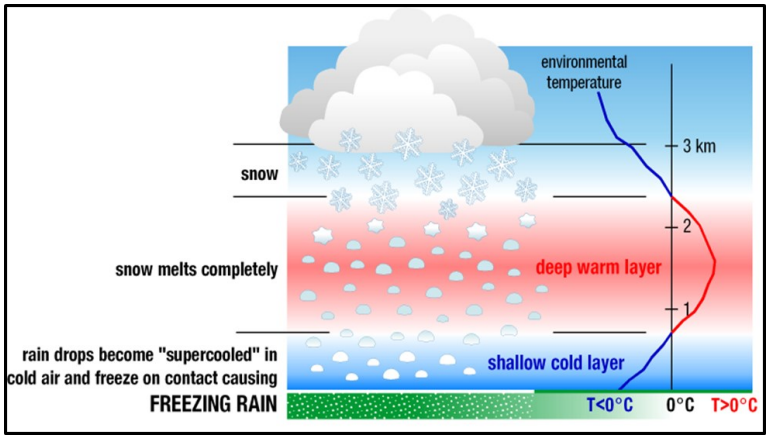


Weather Map at 7 AM on February 16

Significant Weather Report

Station Number:	MA-MD-158
Station Name:	Sherborn 1.1 NW
Date:	2/16/2021 6:00 AM
Submitted	2/16/2021 6:07 AM
Notes:	0.1 inch flat ice accretion

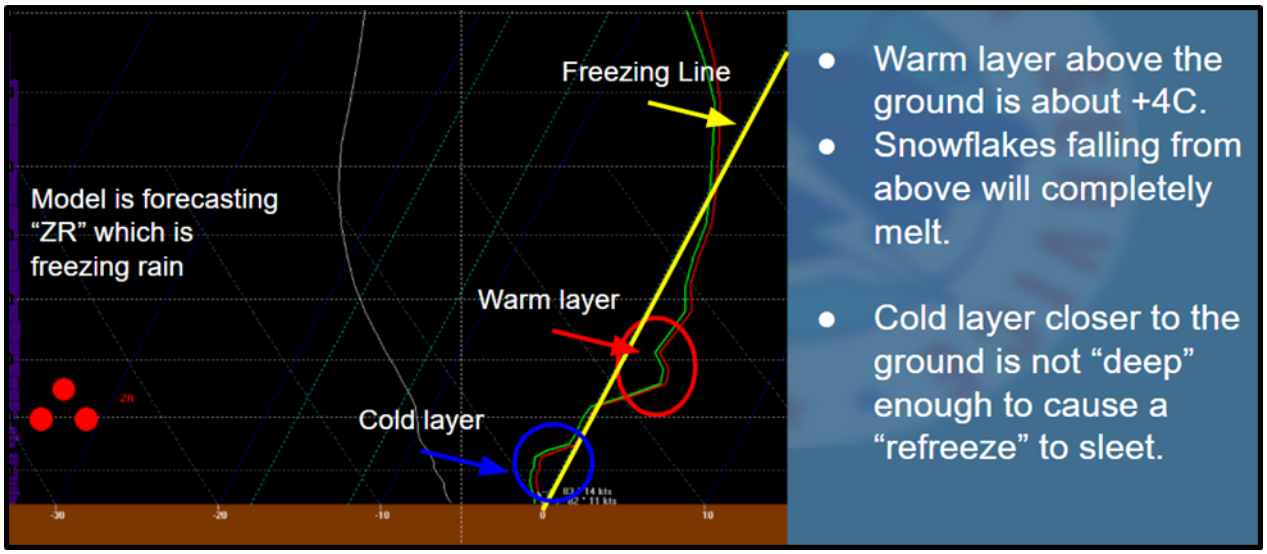
How does freezing rain form? You need air temperatures to be above freezing a few thousand feet off the ground, and through a relatively deep layer in order for snowflakes to melt as they fall. Then temperatures (or objects) at the ground need to be below freezing so the liquid water freezes and forms ice upon contact. The image below shows the temperature profile that is needed in order for freezing rain to occur. Note the presence of below freezing temperatures where snowflakes are forming, a pronounced above freezing temperature layer in the middle which melts the snow, and a shallow sub-freezing layer near the ground. If the layer near the ground becomes too deep, the rain drops partially refreeze and form sleet.



Temperature profile that is favorable for freezing rain (Courtesy of COMET).

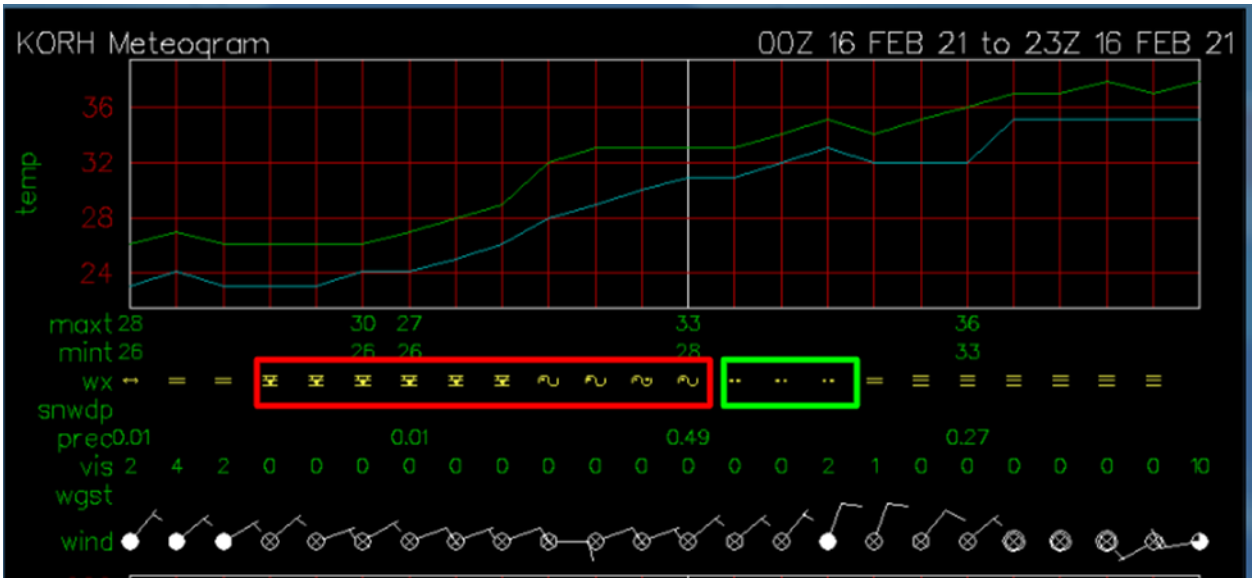
Review of 2020-2021 Winter Storms (continued)

Weather models were showing similar conditions that would be favorable for freezing rain, especially across interior sections of Connecticut and Massachusetts. In the model forecast below, you can see the temperature is below freezing well off the ground but there is a warm layer (above freezing) in the middle and a cold layer closer to the ground. The model correctly forecasted “ZR” which is freezing rain.

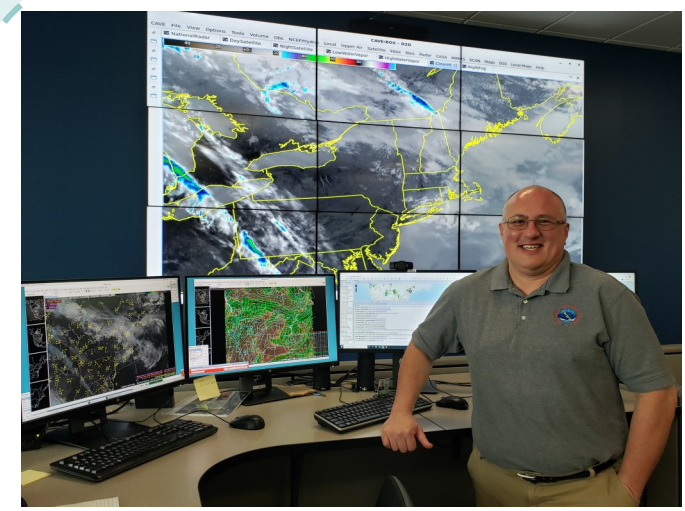


Model forecast sounding for Worcester, MA at 5 AM on February 16.

The observations from Worcester matched this nicely. Note the reports of freezing rain in the red box overnight and the change to rain during the morning in the green box. The wind was light from the northeast during that time, which helped maintain a source of sub freezing air into the region.



Weather observations from Worcester, MA on February 16.



MIC Musings:
A Year of Overcoming Challenges

by Andy Nash
Meteorologist in-Charge, NWS-Boston

Well, as I write this note to all of you, we have reached the one year mark of having to conduct our operations under fairly stringent COVID-related restrictions. Although this has greatly curtailed our ability to get out of the office and conduct in-person spotter training, visits to schools, and other community talks, it doesn't mean we stopped doing those important activities. I'm proud of the effort that the meteorologists here have made to pivot to using technology to conduct the outreach virtually. It's not been ideal, but has been more successful than we thought. For example, the virtual spotter training we conducted last year allowed us to reach far more people (750 people in 3 sessions) than we would have otherwise. With this year's round of spotter training, we will be hosting 5 virtual sessions, and I expect that next year we will keep a virtual component to the training and other outreach activities, even as we get back into the community to do in-person events. It's part of accepting the challenges we are given and turning that into success.

On the subject of challenges, the last several months have proven difficult at our Upper Air Observation site in Chatham, Massachusetts where we release our weather balloons. The buildings are located near a bluff that overlooks the ocean. The erosion rate of the bluff has accelerated to a rate where it is no longer feasible, or safe, to operate from that location. As a result, we have had to put together an expedited decommissioning plan. March 31st will be the last day of balloon launches with demolition scheduled for sometime in April. We have been at that location since 1970, so there is an element of sadness with the situation. We don't yet know where we will relocate our Upper Air observation facility, but we do know that we will get a state of the art observation system when that time comes.

I'd like to close with a short summary of some upcoming changes we are working on as part of our improving and evolving our products and services. A couple are discussed in this newsletter; the new climate normals and the NWS' National Water Center model which will be a game changer for our hydrology program. Beyond that, this spring we will be rolling out a new web page that will make it easier for emergency managers and the public to access our Total Water Level forecasts for coastal flooding and we will be expanding our marine forecast responsibility from 20 nautical miles from the coast out to 60 nautical miles. Lastly, the NWS has approved moving forward with implementing Hazard Simplification in 2024, which will greatly improve our ability to clearly message expected threats and impacts associated with severe weather. I find all of these changes to be exciting and I hope you will, too.

Virtual Skywarn Training Dates — 2021

** **REGISTER on link at weather.gov/boston**

Instructors for this year's training are:

Bryce Williams, NWS-Boston Forecaster
Frank Nocera, NWS-Boston Lead Forecaster
Glenn Field, NWS-Boston Warning Coordination Meteorologist
Robert Macedo, BOX Amateur Radio Coordinator

WELCOME TO OUR NEWEST STAFF

ROB MEGNIA, Meteorologist

My name is Rob Megnia and I'm a native of Marshfield, MA(MHS 2009, GO RAMS!). Experiencing nor'easters growing up in a coastal community sparked my interest in meteorology, especially seeing what the storms can do with respect to coastal flooding!
I graduated from Plymouth State University in 2013 with a B.S. in Meteorology. In the fall of 2015, I went back to PSU to earn my Masters in Applied Meteorology. I completed my thesis research on interactions between the NAO/PNA and their impacts on Northeast weather.

The summer following my first year of grad school (2016), I began my NWS journey when I served as a volunteer intern at the WFO in Gray, ME. The following December, I completed my masters in Applied Meteorology and officially joined the NWS as a Meteorologist Intern for the WFO in Lake Charles, LA on February 6, 2017. Some of the highlights during my tenure in Lake Charles included:

- Submitted a proposal for the consideration of testing Instagram accounts for WFOs, which was agreed upon by the NWS Emerging Tech Team (testing in progress for several NWS offices!)
- Authored a paper published in the NWS Journal of Operational Meteorology (*The Historic 2 April 2017 Louisiana Tornado Outbreak*)
- Developed a Python-based MesoAnalyst tool used to assess favorability of near storm environments
- Presented posters at AMS Austin 2018, NWA St. Louis 2018. Gave oral presentations at NWS St. Louis 2018 and AMS Boston 2020.
- Served as the Local Modeling Focal Point — implemented 8 member WRF time-lagged ensemble
- Worked during Hurricane Harvey. A city in our forecast area broke the CONUS rainfall record with 60+ inches! Also worked the lesser-known Tropical Storm/Depression Imelda (2019) that dumped 45+ inches.

After 3 1/2 years in Lake Charles, I fulfilled a lifelong goal by being selected as a Meteorologist at WFO Boston/Norton. I'm thrilled to be serving the Commonwealth and communities in which I grew up! Outside of work, I am a die-hard Boston sports fan (especially the Patriots), beach bum, horror movie buff, and golf enthusiast. I also enjoy going to the gym and running/walking/hiking with my Boxer/Great Dane Josie.

WELCOME TO OUR NEWEST STAFF

KRISTIE SMITH, Meteorologist

Kristie joined the NWS Boston/Norton team in August of 2020. Originally from New Hampshire, Kristie attended the University of New Hampshire, earning a B.S. in Earth Science with a concentration in Geophysics in 2017. In pursuit of her passion for the weather, Kristie then shipped out to the University of Wyoming to obtain her M.S. in Atmospheric Science, graduating in the summer of 2019. Her thesis work was titled: “The Effect of Enhanced Atmospheric Turbulence on Snowfall Accumulation Rates.”

Prior to joining the National Weather Service, Kristie held the position of Associate Scientist at Avmet Applications, Inc., an FAA Consulting / Aviation Meteorology firm based in Reston, Virginia, where her primary roles included conducting research on urban air mobility initiatives, supporting the FAA’s Aviation Weather Division, and supporting the United States Representative to the International Civil Aviation Organization (ICAO).

Pictured: Kristie in front of the Laramie, WY EF-3 tornado on June 6, 2018

A New Normal?

by Bill Leatham, Forecaster, NWS-Boston

The United States climate normal are in the process of updating from the 1981-2010 period to 1991-2020. The new normal should be out later this spring. NOAA National Centers for Environmental Information (NCEI) is the official source for climate normals for U.S. stations. This begs the question, "What are climate normals?" The normal of a particular parameter is defined as the 30-year average. However, much more goes into the NCEI climate normals product than simple 30-year averages. There are procedures that are put into place that deal with missing and suspect data values. The procedures and calculations that NCEI follows are based on the World Meteorological Organization's (WMO) practices. The normals are calculated if there are valid monthly values in 80% of the years in the averaging period. Monthly averages are not calculated if observations are missing in 11 or more days in a single month or observations are missing for a period of 5 or more consecutive days within a month. All of the WMO details can be found in: https://library.wmo.int/doc_num.php?explnum_id=4166. For daily and monthly normals, complex estimation and scaling procedures are used with temperature and precipitation normals to ensure they are representing the 30-year period and are internally consistent. The science behind the normals is the same as the 1981-2010, with only minor calculation technique updates.

Normals are calculated for two reasons. One of the reasons is to use it as a reference period for monitoring current weather and climate. Another reason is that they are used to help plan for conditions beyond the time span of reliable weather forecasts. The 30-year period was first chosen in the 1930s by the governing body of international meteorology in the 1930s. Many countries update these normals every 10 years to keep them up to date, but it wasn't until 2015 when it was made a WMO standard.
All countries will be calculating the 1991-2020 normals. Once the new normals are available there will be visual maps of changes between the 1981-2010 and 1991-2020 normal. We have yet to see the new normals for our southern New England climate sites, but be on the lookout later this spring once these data become available.

Additional reference:

https://www.weather.gov/media/climateservices/Normals_Information_Handout_February_2021.pdf

WCM Corner

by Glenn Field, Warning Coordination Meteorologist, NWS-Boston

2021 Southern New England Weather Conference Postponed

Sadly, COVID-19 has forced us to postpone our 20th annual conference once again. The health and safety for our presenters/attendees is our top priority. We held a virtual mini-conference back in November, 2020 and hope to do something similar this year. Stay tuned for more information.

"Ultra-Severe Thunderstorms" to Alert on Cell Phones (WEA)

Wireless Emergency Alerts (WEA) currently are triggered on cell phones for Tornado Warnings and Flash Flood Warnings that are designated as "Considerable" or "Catastrophic" by the local forecast office. However, Severe Thunderstorm Warnings do not trigger the WEA because they are too numerous across the country and we don't want people to get alerts so frequently that they become immune to them.

While the lowest level Severe Thunderstorm Warning (58 mph wind gusts or 1" diameter hail) can cause isolated damage, some severe thunderstorms can be very destructive, with baseball-size hail and downburst wind gusts exceeding 80 mph. Beginning on or about April 28, 2021, NWS forecasters will now have the ability to classify ("tag") Severe Thunderstorm Warnings as being "base" (58 mph winds/1" hail); "considerable" (70 mph winds/1.75" golfball-size hail); or "destructive" (80 mph winds/2.75" baseball-size hail). Only those classified as "destructive" will then trigger the WEA system. In the case where winds are only 70 mph but hail is baseball-size, then it will trigger the WEA since both parameters were higher than "base" and since one was "destructive."

By triggering the Wireless Emergency Alert system for these ultra-severe thunderstorms, we hope to save more lives, while not issuing so many that they are ultimately ignored.

Please see the next page for a graphic showing the changes.

WCM Corner - cont'd.

Thunderstorm **Damage Threat Categories**

The National Weather Service issues Severe Thunderstorm Warnings (SVR) when a severe storm is happening or imminent, letting the public know it's time to take action to stay safe (such as taking shelter).

These warnings are Impact-Based, focusing on the expected storm impacts, allowing for more precise communication and recommended actions.

Now, to further improve communication, NWS will be including Damage Threat Categories to all SVRs.

Considerable / Destructive Tags

Thunderstorm Damage Threat (tag category)	Wind	Hail diameter	WEA?
Base (no tag; default)	58 mph (60 mph will appear in the warning)	1.00 inch (U.S. quarter)	NO
Considerable	70 mph	1.75 inch (golfball)	NO
Destructive	80 mph	2.75 inch (baseball)	YES

- The highest of the categories will be invoked if both qualify (i.e. if the hail triggers Considerable but the wind triggers the Destructive category, then Destructive will be displayed).
- Wireless Emergency Alert (WEA) messages will be activated on mobile devices whenever a 'Destructive' Severe Thunderstorm Warning is issued. For more information on WEAs, please visit **weather.gov/wrn/wea**.

National Weather Service weather.gov

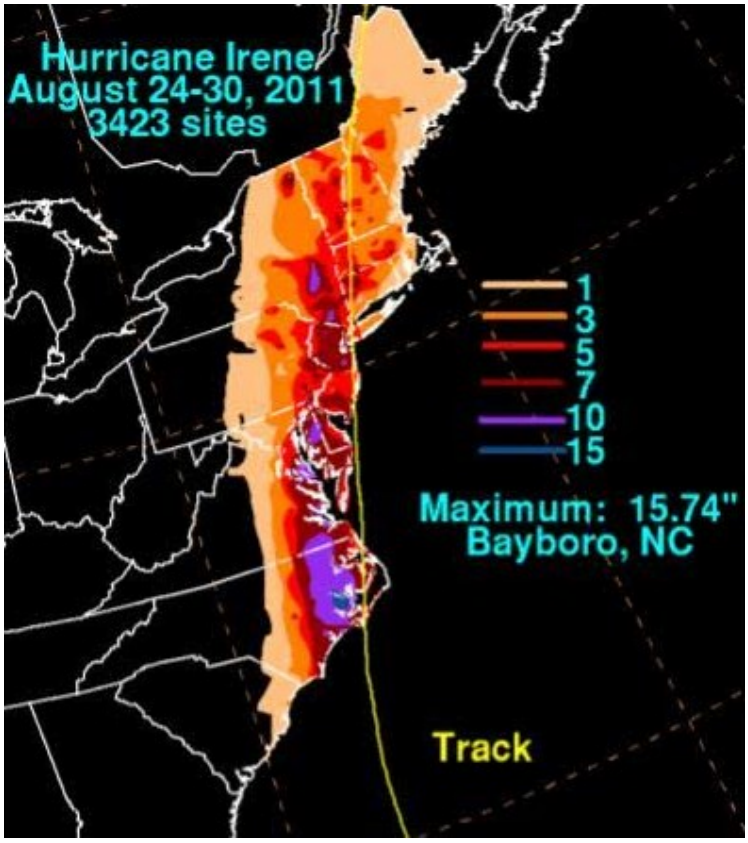
10th Anniversary of Tropical Storm Irene

by Nicole Belk, Senior Service Hydrologist, NWS - Boston

This August will mark the 10th Anniversary of the Floods from Irene. Hurricane Irene, which became Tropical Storm Irene as it crossed into southern New England, brought damaging winds and copious amounts of rainfall into the area.

In southern New England, the heaviest rainfall occurred during the overnight hours of Saturday night the 27th, lasting until midday Sunday the 28th. In our region, the heaviest rains fell over the east slopes of the Berkshires, into Hartford County CT, with totals ranging from 6 to 10 inches. From the Connecticut River eastward into central MA and northeast CT, rainfall totals were lower but still substantial, ranging from 2.5 to 6 inches. Totals in Rhode Island were generally 2 to 4 inches. Much less rain fell along the immediate coastline of MA as well as southeast MA, with totals of 0.5 to 2.5 inches.

Radar mosaic as Irene neared New England



Irene's rainfall totals (inches)

In Western MA and north central CT, the response of rivers and streams was profound. Several river locations monitored by the United States Geological Survey (USGS) in Franklin and Hampshire Counties in MA had new peaks of record. In addition, landslides occurred along some of the steeper terrain along Route 2 in northwest MA, resulting in a road closure that lasted for 3 months.

10th Anniversary of Tropical Storm Irene (continued)

Major flooding occurred in portions of northwest Massachusetts, from Greenfield northwest through Colrain, Leyden, Buckland, Charlemont, and vicinity. Numerous roads were flooded. There were numerous evacuations and a number of homes that were flooded and others also condemned. One building in Shelburne Falls along the Deerfield River was moved approximately 100 yards downstream of its foundation.

Along the Deerfield River in between MA Route 5 and Interstate 91, a large swath of farmland was inundated, and many homes within that stretch experienced various degrees of flooding. The Mohawk Meadows Country Club at the junction of the Connecticut and Deerfield Rivers was submerged. On the Green River in Greenfield, the Eunice Williams Covered Bridge dislodged from its abutments, and the river scouring was so severe the river diverted itself around the bridge.

In western MA, the Westfield River at Westfield crested at 19.9 feet, just short of the Major Flood Stage of 20 feet. Two out of the 3 major tributaries to this river are under substantial control from the Corps of Engineers' Knightville and Huntington Dams. The majority of the runoff contributing to the high-end moderate flood on the Westfield River in Westfield came largely from a single uncontrolled tributary, the West Branch Westfield River.

In north central CT, signficant flooding occurred along the Pequabuck River, with numerous water rescues and a building collapsing into the river. Significant floodwaters washed onto and flowed through Main Street in Bristol. One person drowned and was found approximately 2.5 miles downriver in the Forrestville Section of Bristol. With much of Irene's heavy rainfall occurring along the length of the Connecticut River Watershed, serious flooding occurred on this waterway as well. At River Forecast Points along the Connecticut River from Montague MA south to Middletown CT, the River had its highest peak since 1987, except 1984 at Montague.

A washed out bridge on the West Branch of the North River in Colrain, MA

A roadway torn up by flood waters in Shelburne Falls, MA

Know what to do before, during and after a flood. Visit www.weather.gov/floodsafety

WX1BOX Amateur Radio Operations During High Impact Weather Events and SRD 2020

by Robert Macedo, KD1CY, Skywarn Coordinator for NWS-Boston

2020 continued to be a year of Skywarn self-activations even during high impact weather events that affected the region. This included events such as Tropical Storm Isaias on August 4th, 2020, the derecho severe weather outbreak on October 7th, 2020, and various winter storms that affected the region. Also, Skywarn Recognition Day 2020 was handled with a combination of remote operations and operations at NWS Boston/Norton thanks to the efforts of our Warning Coordination Meteorologist, Glenn Field, who is also an amateur radio operator (Call sign: KB1GHX).

On August 4th, 2020 – Tropical Storm Isaias impacted southern New England — our region was on the strong to damaging wind and severe weather side of the system. Isaias caused widespread pockets of tree and wire damage, including some direct structural damage to buildings. Skywarn nets were active on various local area repeaters and Western Massachusetts ARES also activated a HF net in support of Isaias. Isaias was a top 5 power outage event in Connecticut with around 250,000 without power in Massachusetts and a significant number of power outages in Rhode Island. Connecticut ARES/Skywarn shared reports and photos of damage not only with the National Weather Service but with the American Red Cross in Connecticut for damage assessment. The point of contact for Red Cross was W2ROS-Rosty Slabicky who monitored the Hartford-Tolland County Skywarn net via Echolink.

Roof torn off an apartment complex in Wethersfield, CT. Photo by Jim Peruta (KC1JDP).

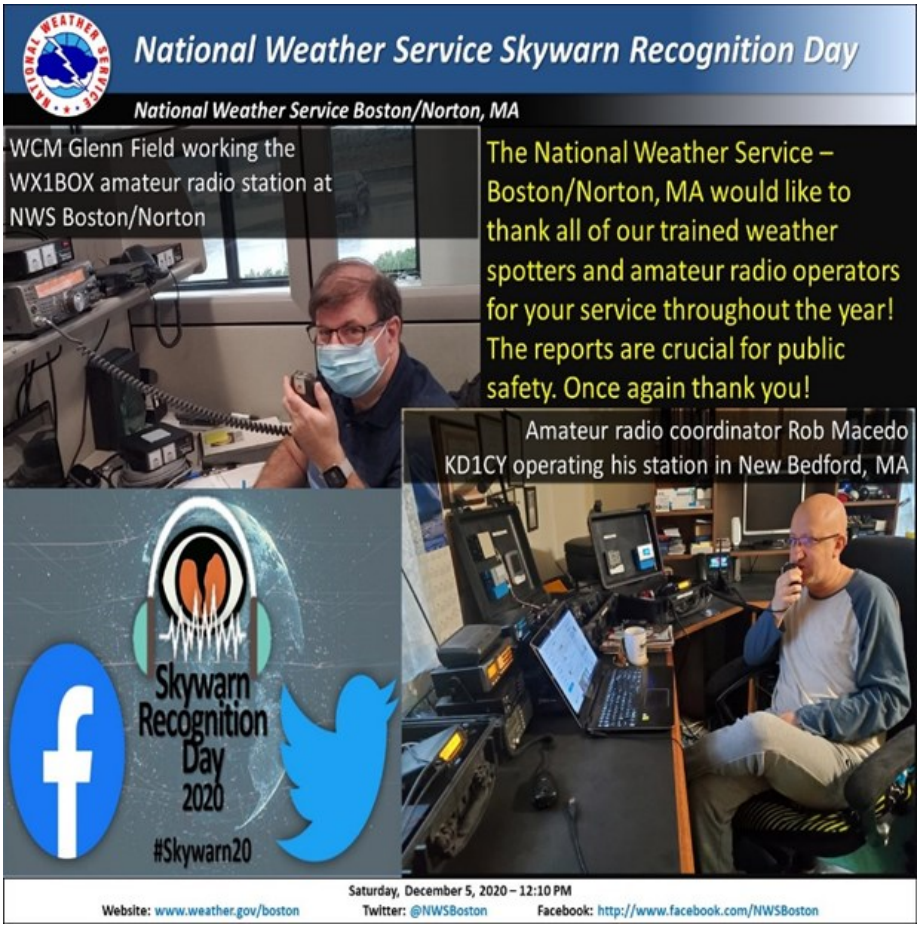
WX1BOX Amateur Radio Operations—continued

On Wednesday October 7th, 2020, a derecho, which is a Spanish word that means “big wind”, is utilized to describe a complex of strong to severe thunderstorms that traverse an area of 240 miles or greater affected our region. The derecho started in west-central New York and traversed an area all the way through the southeast New England coast. Widespread pockets of tree and wire damage and even direct structural damage was associated with this derecho. Many hail reports also were received from this system. Amateur radio nets were active on numerous frequencies and relayed data to Skywarn Coordinator liaisons at their amateur radio home stations and provided this information into NWS via the NWS chat program. An EF-0 tornado was confirmed in Millis, Massachusetts. Amateur radio nets provided many reports of the storm damage in real time Skywarn spotters and amateur radio operators provided many photos of damage and hail. A photo album of storm damage was created on the WX1BOX amateur radio Facebook page.

Large tree down in Cambridge, MA. Photo by Corey Field.

On Saturday December 5th, 2020, Skywarn Recognition Day (SRD) was held as both an amateur radio event and for non-amateur radio Skywarn spotters. Members of the WX1BOX amateur radio team made contacts with various amateur radio stations while operating from home thanking spotters for their efforts during an unusual 2020 with severe weather and impacts from COVID-19. In addition, a winter storm impacted the region during SRD and reports from stations on snowfall, rainfall, measured wind gusts and wind damage were captured across area repeaters. In addition, the WX1BOX amateur radio station was staffed thanks to our Warning Coordination Meteorologist, Glenn Field-KB1GHX. Glenn did both SRD operations and passed on reports of snowfall from the Paxton and Westford repeaters to his colleagues inside the NWS forecast office for a 2 hour time period. This meant that the WX1BOX amateur radio station was utilized for at least one weather event and for SRD and not silenced for the entire year due to COVID-19. Several other winter storms were managed via Skywarn self-activation with storm damage, snowfall, rainfall and wind gust information sent to NWS via the NWS Chat program by Skywarn coordinator liaisons.

WX1BOX Amateur Radio Operations—continued



The WX1BOX amateur radio team is interested in more amateur radio operators to serve as net control stations, meaning stations that manage the radio traffic on a given amateur radio repeater, when Skywarn nets are active. We are also interested in any Skywarn spotters and amateur radio operators who can support monitoring online weather stations for criteria reports as well as public safety radio monitoring for reports that meet criteria. In addition, the WX1BOX amateur radio team continues to maintain the Skywarn announcement email list for those interested. If you're interested in the email list, being an amateur radio net control operator, or assisting with public safety and/or social media monitoring, contact Rob Macedo-KD1CY, ARES Skywarn Coordinator for the NWS Boston/Norton office at rmacedo@rcn.com

To learn more about the WX1BOX amateur radio team operations, the amateur radio frequencies we utilize, and to get more involved with Skywarn, amateur radio, and see more pictures and videos of past events, check out the WX1BOX social media and websites via the links below:

WX1BOX Facebook Page: http://www.facebook.com/wx1box
WX1BOX Twitter Feed: http://www.twitter.com/wx1box
WX1BOX Web Site: http://www.wx1box.org

Toward the Implementation of Near Real-Time Flood Forecast Inundation Mapping Decision Support Services in the Northeast U.S.

by David Vallee, Hydrologist in Charge, NWS Northeast River Forecast Center—Norton, MA

The Northeast River Forecast Center (NERFC) is leading a Department of Commerce Agency Priority Goal to Mitigate Flood Impacts by Demonstrating Improved Decision Support Services to Emergency Managers. This unique initiative will help improve flood related decision support services by expanding the demonstration of new flood inundation mapping capabilities throughout most of New York and New England. Details on this initiative are available here: https://trumpadministration.archives.performance.gov/commerce/APG_commerce_3.html

The NERFC has been working closely with the National Water Center's Water Prediction and Operations Division based in Tuscaloosa, Alabama to prepare these new services. Working with WFO Norton and the Rhode Island Emergency Management Agency, NERFC organized a Tabletop Exercise for local emergency managers which, for the first time, put these new inundation services in their hands through a retrospective review of the historic floods of March 2010. Exercise participants used a cloud base GIS tool called "GeoCollaborate" to interrogate the inundation predictions based on NERFC's official forecasts as well as predictions which were derived from the new National Water Model. The National Water Model provides complimentary streamflow guidance at over 2.7 million river reaches across the nation, compliment the river forecasts provided by River Forecast Centers. Participants used the new inundation services alongside critical infrastructure information to determine what actions they could have taken had these types of services been available in 2010. Participants were asked to evaluate the services and to identify additional services that would improve their ability to prepare for a significant flood event.

The NERFC will be conducting a second Tabletop Exercise later this Spring with WFO Albany, NY and the New York Office of Emergency Management to continue this effort to expose Emergency Managers to these new services.

An example of the experimental flood inundation areal extent forecast service derived from both the NERFC retrospective forecasts and the National Water Model from 18 UTC, March 30, 2010.

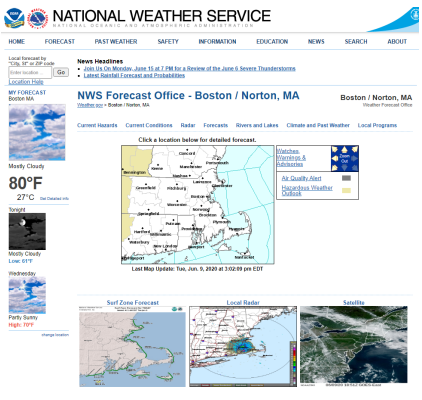
National Weather Service
Southern New England

46 Commerce Way
Norton, MA 02766
Phone: 508-622-3250

The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community.

Meteorologist In-Charge: **Andy Nash**
Warning Coordination Meteorologist: **Glenn Field**
Science and Operations Officer: **Joe DelliCarpini**

Prevailing Winds Editor: **Glenn Field**



Web:
weather.gov/boston
Facebook:
NWSBoston
Twitter:
@NWSBoston
YouTube:
NWSBoston