The pre-Thanksgiving Day snow storm on 26 November 2014 had significant impacts across most of New England including the North Country. Surface low pressure developed during the late evening hours on November 25th across northern Florida and quickly raced along the eastern seaboard on the 26th. This tracked pushed enough Atlantic moisture back into our region, resulting in a tight northwest to southeast snowfall gradient. Figure 1 below shows the North Country storm total snowfall ending on November 27th, which ranged from a couple inches across the Saint Lawrence and northern New York to over a foot in parts of central Vermont. As snow started to fall on November 26th, surface temperatures were near freezing, resulting in a heavy wet snow, which produced scattered power outages across southern Vermont and widespread outages in New Hampshire and Maine. At the peak, nearly 5,000 customers lost power in Vermont, with over 200,000 in New Hampshire and 100,000 Maine, which took nearly a week to restore. It was New Hampshire's 4th greatest power outage in state history. The timing of this storm disrupted many travel plans for Thanksgiving with major delays at airports along the eastern seaboard and hazardous travel by car on countless roads.

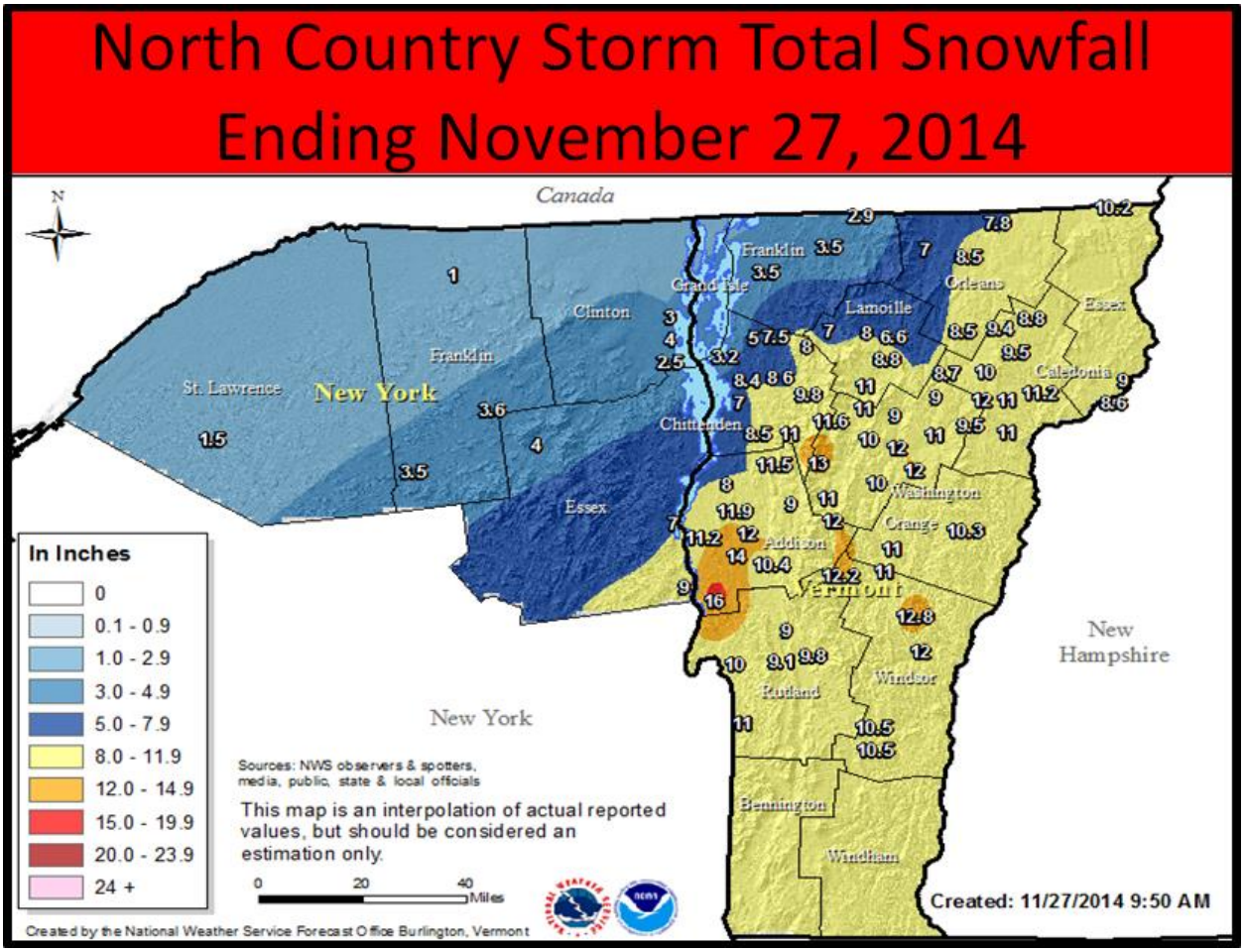

Figure 1: North Country Storm Total Snowfall Ending at 950 am on 27 November 2014.

Figure 2 below shows the KCXX radar estimated storm total snow depth ending on 27 November 2014. The radar did very well depicting the sharp accumulating snowfall gradient across northern New York into Vermont, along with highlighting the meso-band of heavier snowfall over central Vermont. From the display below, the yellow color indicates estimated snow depths from this storm of 10 to 12 inches, with orange highlighting values between 12 and 15 inches across portions of eastern Essex County, NY into western Addison County, VT. This correlates very well with the storm total snow of 16 inches in Orwell, VT and 12 inches in East Montpelier, VT, while further north only 5 inches occurred in Milton, VT. For a complete listing of snow totals from this storm click here.

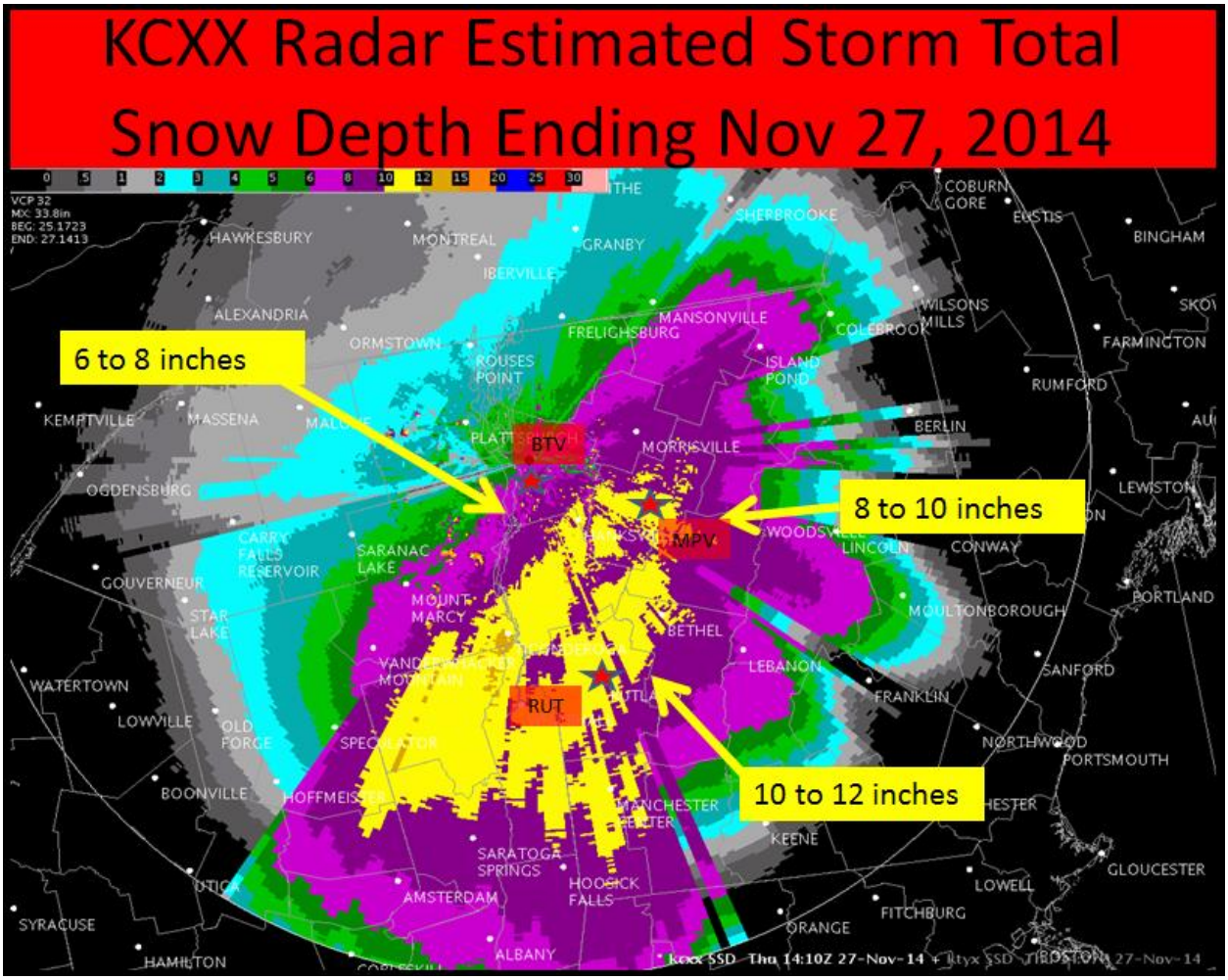

Figure 2: KCXX radar estimated storm total snow depth ending at 910 am on 27 November 2014.

Figure 3 below shows an infrared satellite loop from 1015 pm on November 26th to 115 pm on November 28th, with sea level pressure analysis (yellow lines) and highs (blue "H")and lows (red "L"). At the beginning of the loop a complex area of low pressure was located just east of South Carolina and quickly tracked north along the coast to Cape Cod on the evening of November 26th and into the Canadian Maritimes by the 27th. The surface pressure deepened from 1008 mb to 992 mb during this time period. Also, in the satellite loop below the yellow and brighter orange colors indicate the colder/higher cloud tops that produced the heavier precipitation during this event.

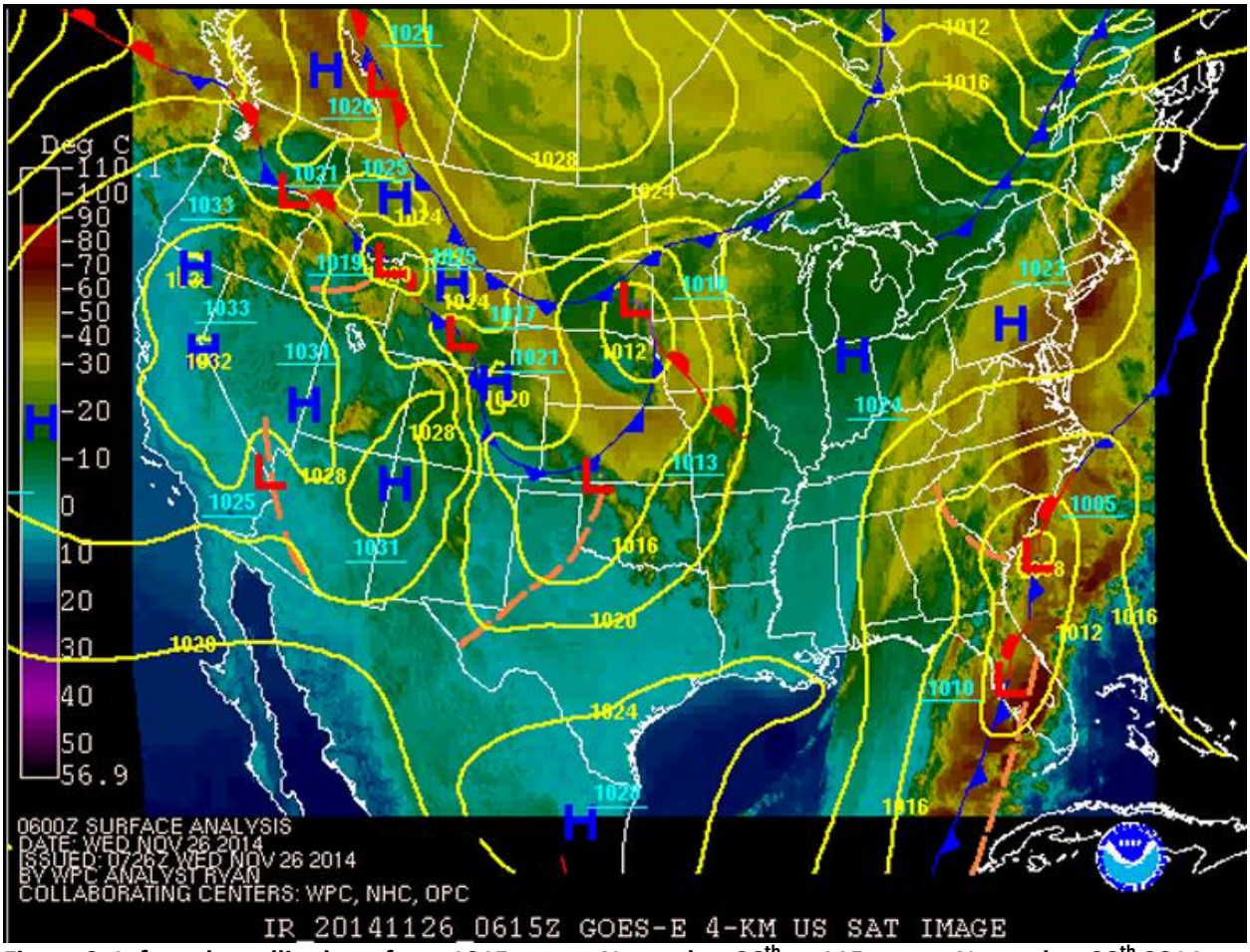

Figure 3: Infrared satellite loop from 1015 pm on November 26th to 115 pm on November 28th 2014.

Figure 4 shows the radar and surface evolution on 26 November 2014. At 700 am on November 26th surface low pressure was developing near the North Carolina and South Carolina border area and was located near Cape Cod by 1000 pm on the 26th. Surface analysis showed pressure values of 1008 mb at 700 am, but deepened to 996 mb near Cape Cod by 1000 pm on 26 November 2014. This track is very favorable for producing a moderate snow event across central New England, with a sharp northwest to southeast gradient in precipitation across our region. The radar evolution during this event shows an intense snow band located across central Vermont between 100 pm and 700 pm on November 26th, which produce snowfall rates of 1 to 2 inches per hour and surface visibilities below one half of a mile. This band of heavy snow, made for an extremely hazardous evening commute across our region, with poor visibilities and snow covered roadways. Meanwhile, the brighter yellows in the image below along the mid-Atlantic to southern New England coast line indicated very intense rainfall rates, with many locations receiving 1 to 2 inches during this event.

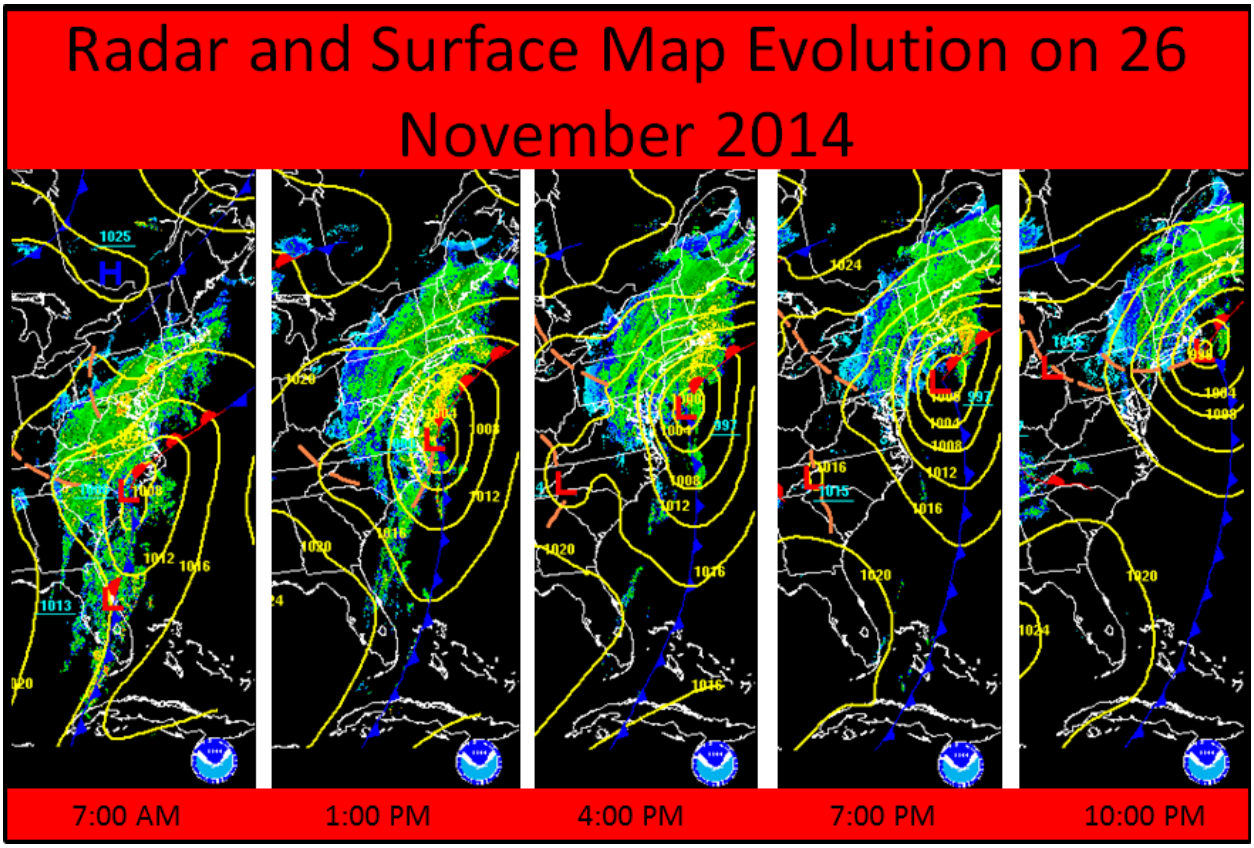

Figure 4: Radar and surface map evolution on 26 November 2014 from 700 am to 1000 pm.

Figure 5 shows a water vapor image at 715 am on 26 November 2014, along with position of surface low pressure and track (Red). The combination of a digging mid/upper level trough and position of a strong jet across southern Canada helped pull deep sub-tropical moisture along the eastern seaboard. This is indicated by the brighter white color clouds in the image below, showing the areas of greater available moisture. The track of deepening surface low pressure helped advect low level Atlantic moisture back into central and southern New England during the event. However, the rapid movement of surface low pressure along the eastern seaboard prevented a blockbuster type storm for our region.

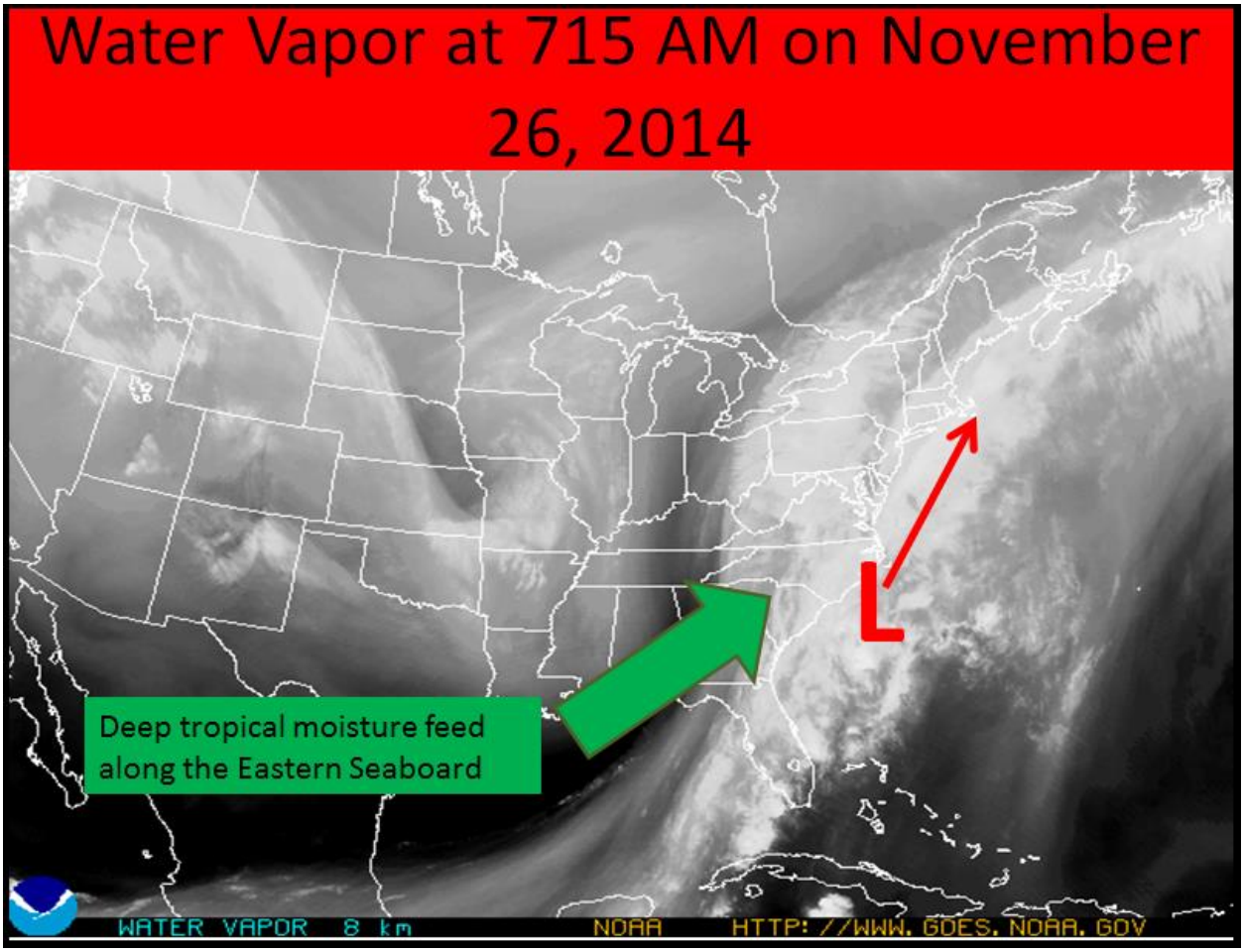

Figure 5: Water vapor and surface low pressure plot (red letter "L") and track (red arrow) at 715 am on 26 November 2014.

Figure 6 below shows several storm related pictures in Essex, Vermont taken by NWS BTV meteorologist Jessica Neiles. Initially with surface temperatures near freezing, a heavy wet snow occurred, which stuck to trees and power lines, especially across southern Vermont and most of southern New England. This produced up to 5,000 people losing power in Vermont and over a quarter million in Maine and New Hampshire. Also, the timing of this significant winter storm produced major delays at many airports along the east coast and disrupted travel on numerous roads. Snowfall across WFO BTV CWA ranged from a couple inches across northern New York to over a foot in central Vermont, making this a moderate winter storm for our region, especially with the timing a day before Thanksgiving.

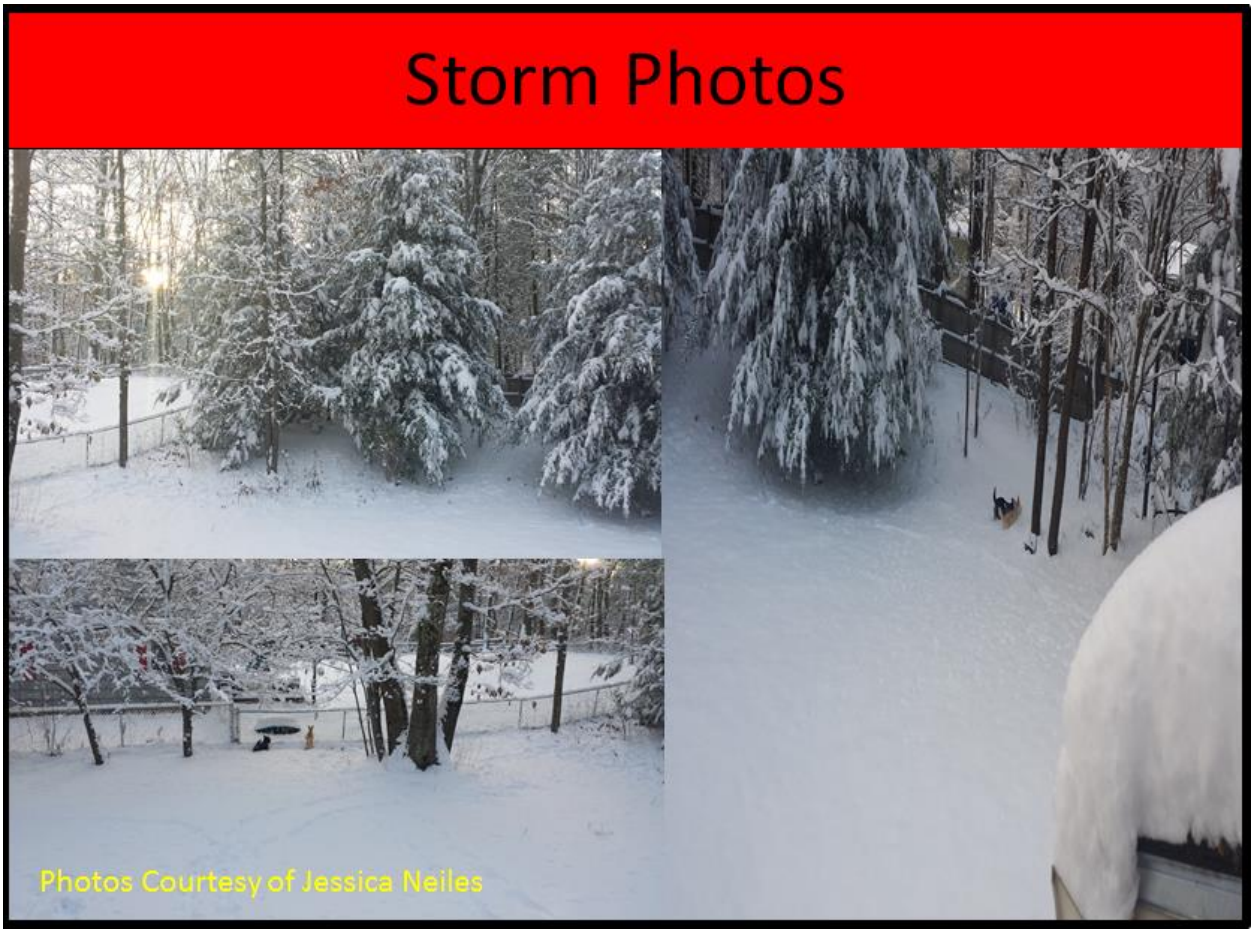

Figure 6: Storm photos courtesy of Jessica Neiles.