

Recent Nor'easter was a storm of historic proportions, says climate scientist

February 12 2013

Last week's Nor'easter will go down in the record books as a once-in-a-lifetime event for residents across much of central New England, with record snowfall at locations from southern Connecticut to eastern Maine, says Michael Rawlins, manager of the Climate System Research Center at the University of Massachusetts Amherst.

Hartford's total of 22.8 inches ranks second in the historical record, and the 28.2 inches recorded at Worcester is third. In Boston, the 24.9 inches reported by the [National Weather Service](#) (NWS) places the [storm](#) at fifth. No other previous snowstorm on record ranks within the top five at all of those locations. Record-keeping began in 1872 in Boston, 1892 at Worcester and 1905 in the Hartford area.

"This event will be remembered for the broad extent of fairly heavy [snowfall](#) across New England," says Rawlins. "Other snowstorms over the historical record have dropped over two feet across parts of New England. This storm did so from Long Island to Maine."

Among the five major NWS stations in Connecticut, Massachusetts and Rhode Island, only Providence did not record a top five snowfall. Further north, Portland, Maine set a record for a single storm with 31.9 inches, illustrating the wide reach of the system. Snowfalls of two feet or more were reported in Connecticut, Maine, Massachusetts, New Hampshire, New York, and Rhode Island.

Rawlins adds that this month's storm will rival, and in some ways

surpass, several memorable past events. For example, the blizzard of February 5-7, 1978 produced a snowfall of 27.1 inches at Boston and 28.6 inches at Providence. The blizzard of 2003, also known as the Presidents' Day II storm, set the all-time record of 27.6 inches at Boston, while the April Fools' Day storm of 1997 was a comparable event for eastern Massachusetts. During that storm, 25.4 inches of snow fell at Boston and the current record of 33 inches was established at Worcester.

However, the 2003 blizzard had limited impact to the north. Heavy snows from the April Fools' Day storm were confined to eastern Massachusetts and neither storm places in the top 5 at either Providence or Hartford.

In this month's big blow, highest snowfall totals across New England fell in a band from south-central Connecticut through east-central Massachusetts and into southern Maine. Snowfall rates of several inches an hour were reported in association with an area of extreme instability in the atmosphere, says Rawlins. Observations from the NWS's Cooperative Observer Network captured the impressive snowfall totals.

In Bakersville, Conn., a cooperative observer recorded 28 inches, the most of any storm there since records began in 1948. An observer reported 30 inches in Bridgeport, the most since records began in 1947. Among Bay State stations, where records extend at least 50 years, Maynard received two feet, behind the 30 and 24.7 inches which fell during the Blizzard of 1978 and the April Fools' Day storm of 1997, respectively.

Amherst's official total of 16 inches last week is shy of the storm record of 20 inches set in February, 1898. The 19.2 inches reported in Walpole also falls shy of snowfall in the storms of 1978 and 1997.

In the Hartford area, the official record since 1905 represents a merging

of NWS observations from Bradley International Airport with older Hartford-area records. While the weather service at the airport recorded 22.8 inches, higher totals were observed to the south near Hartford, where an unofficial report of 27 inches was made, says Rawlins.

He notes that NWS data are considered preliminary until final quality control checks are done at the National Climatic Data Center in Asheville, NC.

Provided by University of Massachusetts Amherst

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