

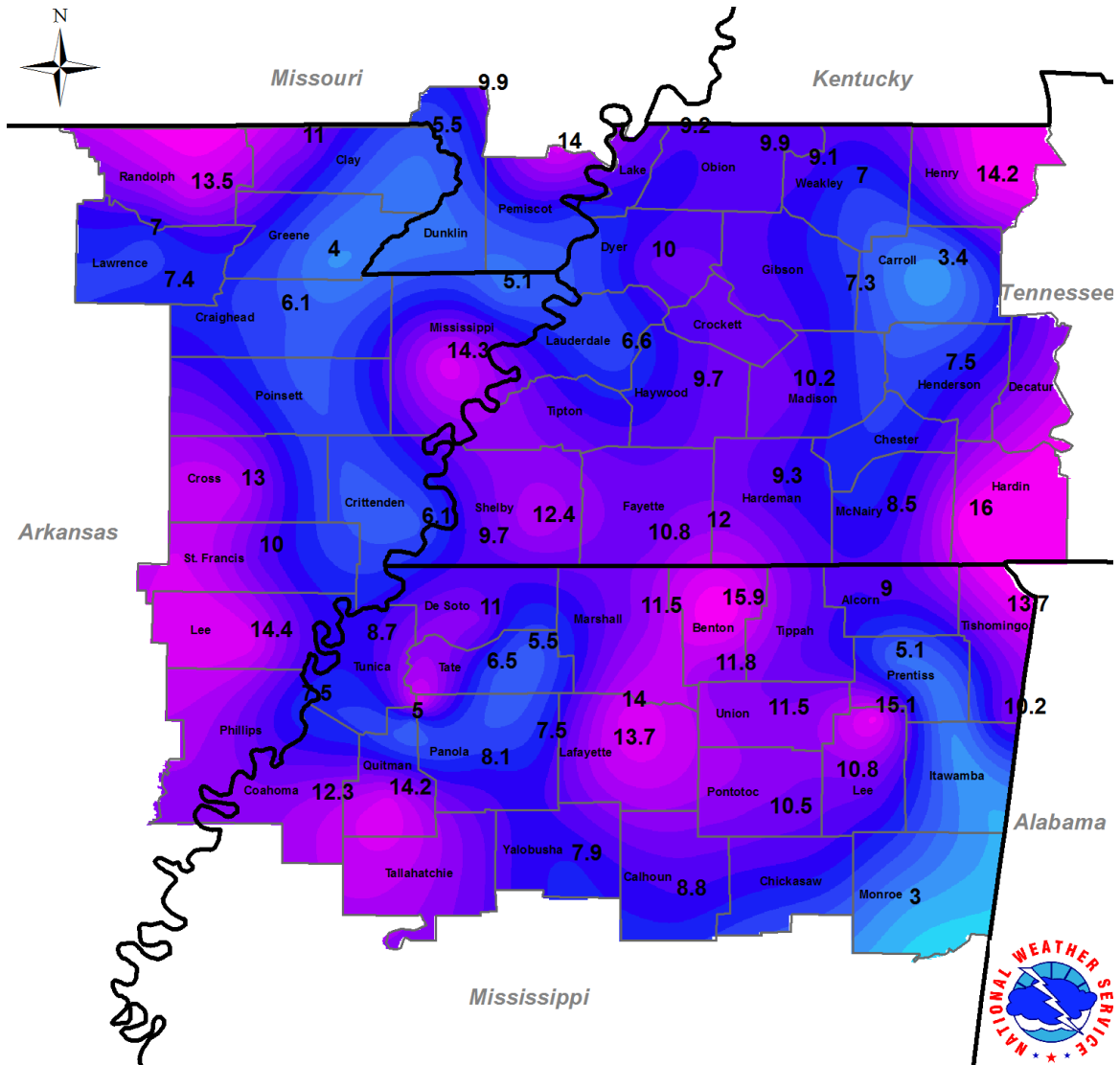
Review of the 2010-2011 Meteorological Winter Season for Memphis, TN

Temperatures have surpassed the 80 degree mark, trees and flowers are beginning to bloom and it's time to transition to our prime severe weather months. The snow and cold of the winter months are now a thing of the past. However, this past winter season was a memorable one and is definitely worth a look back.

Last winter approached with a certain level of anxiety, as we were heading into a fairly strong La Nina pattern. La Nina winters are generally characterized by a heightened severe weather threat including tornadoes due in part to a more dynamic polar jet pattern across the eastern U.S. The recent tornado outbreaks of January 1999 and February 2008 occurred during a La Nina winter.

Due to the impending La Nina, the winter months were keyed on for the potential for spring-like severe weather. Instead, Mother Nature threw a curve ball. This two month period was highlighted by a total of five snow events that each impacted areas of the Mid-South differently. North Mississippi was hit particularly hard. Some areas received nearly 10 times their seasonal norms for snowfall. The Memphis Airport received 9.7 inches of snow for the season which was the most since the 1987-1988 winter season. Seasonal snowfall amounts have increased steadily in the Memphis area over the past three years. Interestingly, Memphis experienced a total of 6 days with measurable snowfall this winter which was the most since the 1984-1985 winter season. Contrastingly, severe weather was very minimal, most of which was relegated to a single event on February 24th that produced one EF-2 tornado in Decatur County, Tennessee.

Through the course of the entire winter season, there was no one particular area that did not receive measurable snowfall. Total snowfall amounts ranged from 3 inches in Aberdeen, Mississippi to 16 inches in Savannah, Tennessee. The following map is a graphical depiction of total accumulated snowfall this past winter season using all climatological and cooperative sites around the WFO Memphis CWA. Copious amounts of snowfall were spread intermittently across the Mid-South.



Snowfall Contours In Inches

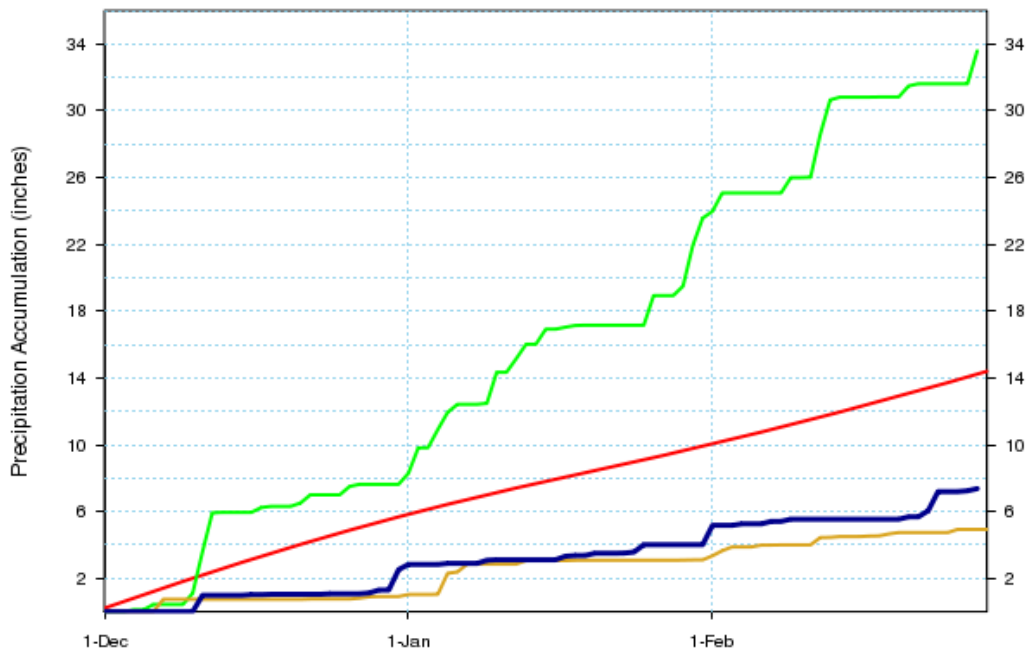
0.01" - 1.00"	8.01" - 9.00"
1.01" - 2.00"	9.01" - 10.00"
2.01" - 3.00"	10.01" - 11.00"
3.01" - 4.00"	11.01" - 12.00"
4.01" - 5.00"	12.01" - 13.00"
5.01" - 6.00"	13.01" - 14.00"
6.01" - 7.00"	14.01" - 15.00"
7.01" - 8.00"	> 15.00"

Winter Season Snowfall	Memphis
Total Snowfall	9.7"
Normal	3.6"
Departure from Normal	+6.1"
Ranking	17 th Snowiest (since 1878)
Snowiest Winter Season	25.1" (1917-1918)

Despite significant snowfall amounts, the Memphis area only received roughly 50% of normal rainfall for the entire winter season. This allowed the ongoing drought through the fall months to persist through the winter with D2 (severe) conditions prevailing across much of the Mid-South and D-3 (extreme) conditions along the Missouri bootheel and extreme northwest Tennessee.

Winter Season Precipitation	Memphis
Total Precipitation	7.37"
Normal	14.23"
Departure from Normal	-6.86"
Ranking	8 th Driest (since 1872)
Driest Winter Season	4.93" (1935-1936)
Wettest Winter Season	33.59" (1949-1950)

Precipitation Summary for Memphis Area
Dec 1 - Feb 29

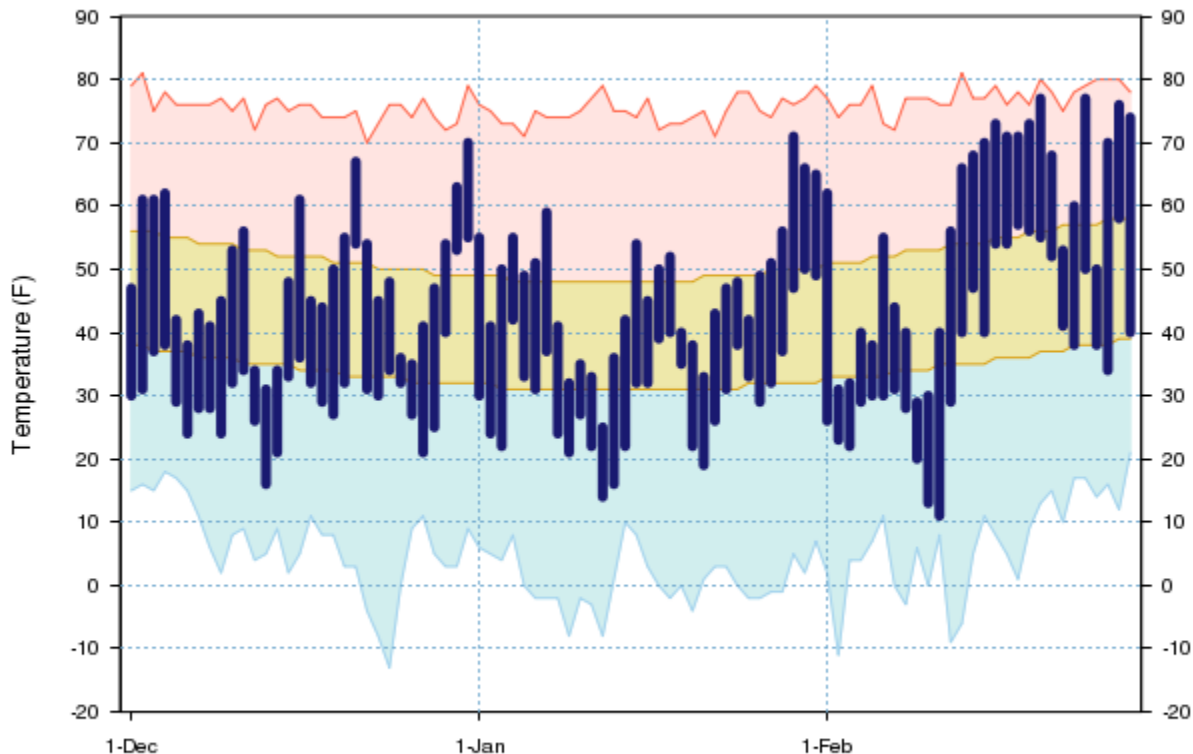


Heavy dark blue line is precipitation accumulation for 2010-2011. Smooth red line is normal.
Green line is accumulation for wettest period (1949-1950). Tan line is accumulation for driest period (1935-1936).
Period of record for wettest and driest: 1872 - 2011.

Overall, temperatures ended up only slightly below normal for the Memphis area. However, at first, it seemed as though we were on pace for a very cold winter. December saw 20 of 31 days with below normal temperatures for the Memphis area with a total of 756 heating degree days; the most for the month of December since 2000, which incidentally was the third coldest December on record. As a whole, temperatures would slowly rebound through January and February with the two month period averaging slightly above normal.

Winter Season Temperatures	Memphis
Average Temperature this Winter	42.1°F
Normal	42.7°F
Departure from Normal	-0.6
Warmest Winter Season	54.2°F (1889-1890)
Coldest Winter Season	35.8°F (1917-1918)

Temperature Summary for Memphis Area
Dec 1, 2010 - Feb 28, 2011



Observed daily maximum and minimum temperatures are connected by dark blue bars.
 Area between normal maximum and minimum temperatures has tan shading.
 Red line connects record high temperatures. Light blue line connects record low temperatures.