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connection

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Double Punch

TWO HARD-HITTING snowstorms pummeled Oklahoma in February. Snow driven by intense winds hit Oklahoma on January 31, 2011 and continued into February 1st. The next storm began February 9th with lower wind speeds, but some higher snow amounts and record cold temperatures.

JANUARY 31st-FEBRUARY 1st

A combination of sleet and light freezing rain arrived on January 31st, quickly changing to snow. Along with the snow came strong northerly winds with gusts up to 35-45 mph. These strong, gusty winds blew snow off fields and open areas into drifts that reached 4-6 feet in height.

Snowfall reports were in the 1-4 inch range in western Oklahoma and 4-8 inches in central Oklahoma. Oklahoma City was at the tip of a broad band of 12-19 inches of snow that spread to the northeast through Tulsa and Bartlesville. Tulsa set a new two-day snowfall record of 14 inches.

Travel across Oklahoma was severely limited. Three traffic deaths and one non-traffic fatality were attributed to this storm. Statewide, 150 accidents were reported with 10 of those injury accidents.

FEB. 8TH TO FEB. 9TH

Then came round two, a storm with high snow totals across northern Oklahoma and lighter winds across the state. A new 24-hour Oklahoma snowfall record was set in Spavinaw, with 27 inches recorded.

February 8th saw the second round of school and business closures. There were 84 traffic accidents reported. None of these traffic accidents had fatalities. Two nontraffic related deaths were attributed to the storm.

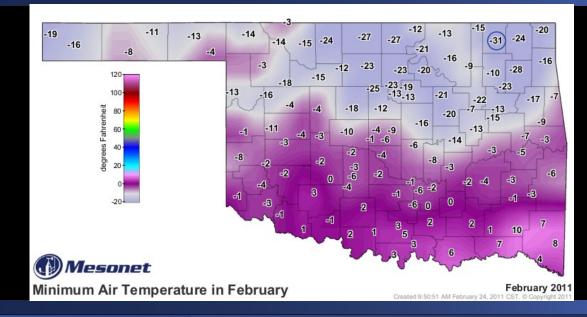
Reported agricultural losses have included adult cows perishing after falling into snow-covered, frozen ponds and calfs lost during blizzard conditions. Wheat and canola got hit on the chin, but most fields are putting on new growth.



MESONET MAPS

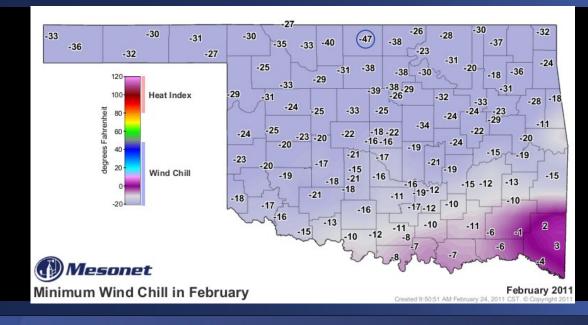
Air Temperature

- This map displays the lowest air temperature observed at each Mesonet site in February.
- The Nowata station set a new record low of -31 observed on February 10.



Wind Chill

- This map displays the lowest wind chill temperature observd at each Mesonet site in February.
- Mesonet wind chill records were shattered in February, with -47 observed at the Medford site.

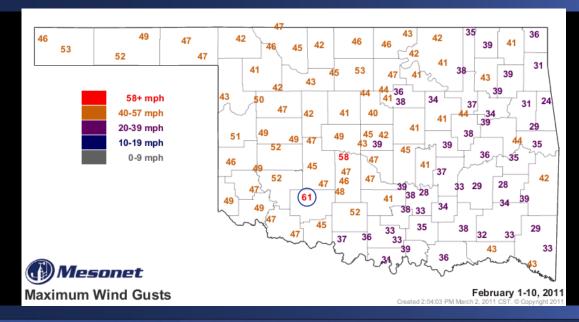




MESONET MAPS

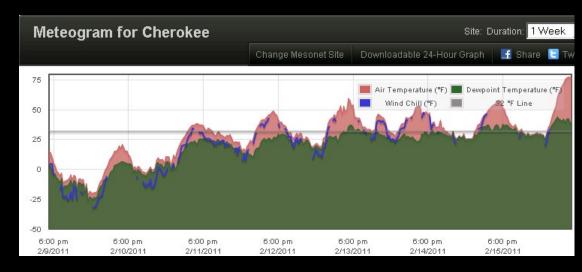
Wind Gusts

- This map displays maximum Wind Gusts observed at each station from Feb. 1 to Feb. 10, a period with record-setting wind chills and heavy snowfall.
- Medicine Park observed a wind gust of 61 mph on Feb. 1.



Meteogram

- This meteogram displays the 102 degree temperature swing at the Cherokee Mesonet site in a 6-day period, from Feb. 10 to Feb. 16.
- To find meteograms from the home page at <u>www.mesonet.org</u>, choose "Weather" from the top menu. From the left-hand menu, select "Station Meteograms."







Extremes & Records

By Gary McManus, Associate State Climatologist

FEBRUARY WRAP-UP

In a state accustomed to extreme weather, February was a bit startling to even the most seasoned veteran of Mother Nature's whimsy. The roller coaster ride began on the month's first day with a crippling blizzard and ended on its last with tornado warnings. The month was peppered with records, including the state's all-time lowest minimum temperature and greatest 24-hour snowfall total. Those extremes occurred amidst the larger backdrop of an intensifying drought across the western two-thirds of the state.

Statewide temperature and precipitation averages look relatively boring in comparison to the singular extreme events. The statewide average precipitation total finished a tad below normal at 1.36 inches, the 55th driest February since 1895. Temperatures moderated throughout the month and ranked as the 43rd coolest on record, around 2 degrees below normal. February also marks the end of the climatological winter, which goes in the books as the 32nd coolest and 11th driest on record.

The month's first 10 days brought three separate snowstorms and a prolonged visit with arctic air. But warm weather was the rule for the second half of the month. Widespread record-high temperatures were recorded on the 17th, with temperatures in the 70s and 80s statewide. Strong southerly winds brought more warmth on the 27th with the Oklahoma Mesonet stations at Grandfield and Walters both recording a high temperature of 90 degrees, the month's highest reading.

The ongoing drought was the other big story during February. The prodigious snowfalls in the northeast helped that area somewhat, but the western half of the state continued with very dry conditions. Much of western Oklahoma received less than a half-inch of precipitation during the month. That continued the ongoing drought intensification in that part of the state, a reflection of the dry winter. The Panhandle, north central, west central and southwestern regions of the state all experienced winters that were within their top-five driest on record, dating back to 1895.

-31°F REACHED at the Nowata Mesonet station, the coldest temperature in Oklahoma

1.36 AVERAGE precipitation in Oklahoma for the month

90°F REACHED at Grandfield and Walters, the warmest in February

O.O3 INCHES of precipitation fell at the Hooker and Camargo Mesonet stations, the driest for the month



Photo taken at Nowata Mesonet Station, February 10.

Temperature	Location	Date
-31	Nowata Mesonet	2/10/2011
-28	Pryor Mesonet	2/10/2011
-28	Bartlesville	2/10/2011
-27	Watts	1/18/1930
-27	Vinita	2/13/1905
-27	Guthrie	1/4/1947
-27	Medford Mesonet	2/10/2011
-27	Blackwell Mesonet	2/10/2011
-26	Pawhuska	1/22/1930
-26	Vinita	1/22/1930

Air Temperature records date back to 1890.

Record Breaking

OKLAHOMANS SPENT THE first two weeks of February digging out and bundling up. Snowfall, air temperature and wind chill records were shattered as winter made itself at home in Oklahoma.

During the February 9 snowstorm, the National Weather Service observed 27 inches of snow at their Spavinaw observing station, setting a new 24-hour snowfall record. Previously, the record was 26 inches of snow in Freedom and Woodward, set during the late-March 2009 blizzard. While the snowfall at Spavinaw spanned two calendar days, it accumulated within a 24-hour period.

The Nowata Mesonet station reached a record -31 degrees on February 10 at 7:40 a.m. Previously, the state's record low temperature was -27, set at Vinita on February 13, 1905 and tied at Watts on January 18, 1930. This low temperature record was approved by the National Weather Service's State Climate Extremes Committee and is now official.

On February 10 at 7:45 a.m., the Mesonet site at Medford recorded a wind chill temperature of -47 degrees, which tops the previous Mesonet record of -36 degrees set at Boise City on February 1, 2011.

In February, 16 Mesonet stations observed a triple-digit temperature swing in a one-week period. The greatest temperature difference was at the Nowata Mesonet site, which climbed 110 degrees in a week.

Wind Chill	Location	Date
-47	Medford Mesonet	2/10/2011
-40	Cherokee Mesonet	2/10/2011
-39	Marshall Mesonet	2/10/2011
-38	Breckenridge Mesonet	2/10/2011
-38	Blackwell Mesonet	2/10/2011
-38	Red Rock Mesonet	2/10/2011
-38	Nowata Mesonet	2/10/2011
-36	Pryor Mesonet	2/10/2011
-36	Boise City Mesonet	2/1/2011
-35	Freedom Mesonet	2/10/2011

Oklahoma Mesonet wind chill records date back to March 1997.

CALENDAR

MARCH

- 9th: OK-First Recertification Training, McAlester, Okla.
- > 15th: OK-First Recertification Training, Tulsa, Okla.
- > 23rd: OK-First Recertification Training, Durant, Okla.
- 25th: Mesonet Summer Camp Application Deadline
- 30th: OK-First Recertification Training, Weatherford, Okla.

APRIL

- ▶ 4th-8th: OK-First Full Certification Course, Norman, Okla.
- ▶ 8th: OK-FIRE Training, Norman, Okla.
- ▶ 12th: OK-First Recertification Training, Ponca City, Okla.
- 19th: OK-First Recertification Training, Oklahoma City, Okla.
- > 21st: ScienceFest, Oklahoma City, Okla.



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Postmark Application Deadline is March 25

CONTACTS

Accessing recent (within the past 7 days) Mesonet data Contact: Mesonet Operator

Instrumentation, telecommunications, or other technical specifications Contact: <u>Chris Fiebrich</u>

Mesonet agricultural data and products Contact: <u>AI Sutherland</u>

Mesonet meteorological data Contact: OCS Data Requests

K-12 educational outreach Contact: <u>Andrea Melvin</u>

OK-First Contact: OK-First Staff

OK-FIRE Contact: <u>J.D. Carlson</u>

Not sure? Contact: 405-325-2541 or <u>Chris Fiebrich</u>.

FORECAST FOR MARCH

Click here to view the original maps from the Climate Prediction Center.



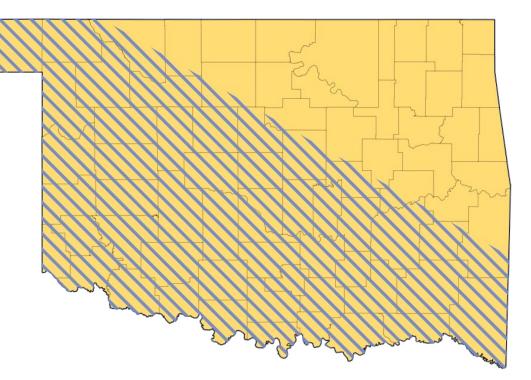
Chance for above average temperatures



Chance for below average

precipitation

DISCUSSION: All of Oklahoma has an increased chance of a warm March. All but the northeast part of the state have an increased chance for a drier month.





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