



Celebration at National Weather Festival

–by Stephanie Bowen

THE MESONET CELEBRATED 20 years of data collection, research, public outreach and education this year. We compiled the top 20 extreme observations below as part of the celebration. Additional information about these extreme observations can be viewed on the Mesonet's 20th anniversary webpage, <http://mesonet.org/20th/>.

The celebration took place at the National Weather Festival on November 1, 2014. It included tents with Mesonet partners displaying their educational information. The Mesonet would like to thank our partners for joining us at the 20th anniversary celebration.

In addition, the Mesonet gave out cookies and hot chocolate for the occasion. The hot chocolate was a big hit with the chilly start to the morning. Many Mesonet stations saw their first freezing temperatures this fall.

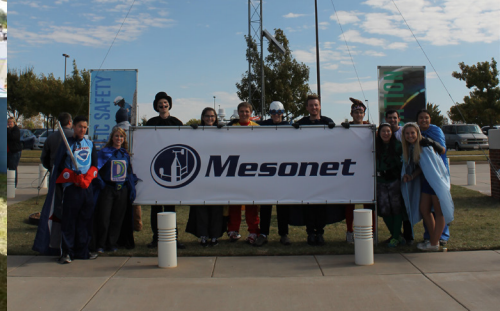
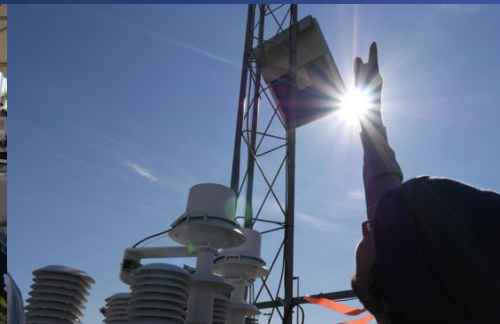
TV meteorologists from across the state sent videos to the Mesonet about how they use the data and also wishing the Mesonet a happy 20th anniversary. The videos were compiled and displayed at the celebration event. The video is posted on Youtube at http://youtu.be/bhU3a_r-FWg. ■

20 YEAR MESONET EXTREMES

- 1 HIGHEST TEMPERATURE: 115°F**
Buffalo 7/9/2009, Erick, Hollis 6/26/2011, Kingfisher 8/1/12, Wilburton, Wister 8/3/11
- 2 HIGHEST HEAT INDEX: 125°F**
Calvin, 8/9/1999
- 3 LOWEST TEMPERATURE: -31°F**
Nowata 2/10/2011 (State Record)
- 4 LOWEST WIND CHILL: -47°F**
Medford 2/10/2011
- 5 WARMEST LOW TEMPERATURE: 89°F**
Stillwater 8/2/2012
- 6 COLDEST HIGH TEMPERATURE: 4°F**
Kenton 2/2/2011
- 7 LONGEST STRETCH OF CONSECUTIVE HOURS BELOW FREEZING:**
Vinita, 282 hours on 12/23/2000-1/4/2001
- 8 101 DAYS WITH HIGH TEMPERATURES ABOVE 100°F:**
Grandfield in 2011 (State Record)
- 9 HOTTEST SUMMER IN OKLAHOMA HISTORY:**
June-August 2011 (Average High 100.5°F)
- 10 50 DAYS WITH CONSECUTIVE HIGH TEMPERATURES ABOVE 100°F:**
Walters, Tipton, Hollis, Grandfield, and Altus 6/22/2011 - 8/10/2011
- 11 GREATEST 7 DAY TEMP CHANGE: 110°F**
Nowata (from -31°F on 2/10/2011 to 79°F on 2/17/2011)
- 12 GREATEST 1 HR TEMP CHANGE: 40°F**
May Ranch on 3/8/2002 (74°F to 34°F)
- 13 GREATEST 1 HR RAINFALL: 6.47"**
Cheyenne on 6/14/1996
- 14 HIGHEST ANNUAL RAIN: 76.61"**
Broken Bow in 2009
- 15 LOWEST ANNUAL RAIN: 6.23"**
Hooker in 2011
- 16 HIGHEST 1 DAY RAINFALL: 12.42"**
Burneyville on 4/29/2009
- 17 WINDIEST DAY ACROSS OKLAHOMA: AVERAGE GUST OF 52.2 MPH**
across all stations on 2/24/2007
- 18 MESONET SITE STRUCK BY LIGHTNING THE MOST TIMES:**
Clayton at six strikes
- 19 HIGHEST WIND GUST: 151 MPH**
El Reno on 5/24/2011 (State Record)
- 20 MESONET SITES DESTROYED BY TORNADES:**
Tipton and Fort Cobb on 11/7/2011

MESONET IN PICTURES

20th Anniversary Celebration



MESONET IN PICTURES

20th Anniversary Celebration





October Rains Plentiful for Some, Scarce for Others

By Gary McManus, State Climatologist

OCTOBER WRAP-UP

One weekend of heavy rain brightened the fortunes of some Oklahomans during October, while others continued on in the embrace of significant drought. Eastern Oklahoma, especially the far northeast corner, came out the big winner in the moisture sweepstakes. Those across the western half of the state, particularly southwest Oklahoma, were not so lucky. According to preliminary data from the Oklahoma Mesonet, the statewide average rainfall total for the month was 3.42 inches, just a tad above normal and the 41st wettest October, since records began in 1895. Punctuating the stark difference in fortunes along the southwest-to-northeast diagonal of the state, northeastern Oklahoma saw widespread totals of 5-9 inches, but much of southwestern Oklahoma received less than an inch. Northeast Oklahoma recorded an average of 5.99 inches, nearly 2.5 inches above normal and the 16th wettest October on record for that area. Meanwhile, southwest Oklahoma garnered a measly 1.34 inches, more than 1.5 inches below normal and the 39th driest on record. The Mesonet site at Oilton led the state with 9.04 inches, while Mangum recorded a paltry 0.57 inches. The near normal totals of October kept the year-to-date statewide average in firm deficit mode at 25.07 inches, 6.78 inches below normal to rank as the 26th driest January-October on record. Southwest Oklahoma stands out in that time frame with an average of 18.32 inches, 9.37 inches below normal to rank as the 17th driest.

Unlike precipitation, temperature had no intention of finishing near normal during October. The statewide average temperature, as determined by the Mesonet, was 64.1 degrees, 2.8 degrees above normal to rank as the 20th warmest on record. The month's highest reading from the Mesonet was 99 degrees from several sites on October 7, although 90s were recorded as late as the 27th. The lowest reading of 23 degrees was reported at Oilton on the month's final day. Combined with a somewhat warm September, the average for the first two months of climatological fall was 68.6 degrees, good for the 27th warmest such period on record. The year-to-date average of 62.1 degrees remained 0.7 degrees below normal and ranked as the 28th coolest January-October since 1895.

The warm weather was a disappointment to those hoping drought would begin to taper during what is considered the beginning of Oklahoma's cool season and secondary rainy season. Daytime highs in the 80s and even 90s at times kept pressure on the soils and reservoirs in the areas impacted by significant drought. Owing to the uneven precipitation pattern of October, the U.S. Drought Monitor showed an overall decrease in drought from 73 percent to 64 percent, but an increase in extreme-exceptional drought – the two worst categories – from 21 percent to 23 percent. Nearly the entire eastern half of the state was drought free, although some moderate drought was noted to the east of I-35 in northern and southern Oklahoma. The majority of southwestern Oklahoma remained in extreme or exceptional drought. One year ago, only 27 percent of the state was considered to be in drought according to the Drought Monitor.

3.42"

average statewide precipitation
for October

20th WARMEST

October since records began in 1895

64.1°F

average statewide temperature
for October

64 PERCENT

of the state in at least moderate drought
according to the U.S. Drought Monitor
on October 28

CALENDAR

NOVEMBER

- ▶ 1st: Oklahoma Mesonet 20th Anniversary Celebration at National Weather Festival, National Weather Center, Norman
- ▶ 4th-5th: Oklahoma Ag Expo, Midwest City
- ▶ 11th: OK-FIRE Workshop, Woodward
- ▶ 13th-14th: OSU OCES In-Service Training, Norman
- ▶ 13th-15th: Project Learning Tree Workshop, Little Rock, AR
- ▶ 14th-15th: Oklahoma Farm Bureau Annual Meeting, Tulsa
- ▶ 18th: OSU Science Cafe Forum, Stillwater
- ▶ 22nd: STEM-WX Teach Workshop, NWC
- ▶ 22nd: Science Olympiad Event, Broken Arrow

DECEMBER

- ▶ 2nd-3rd: OK State Dept of Education Science Standards Workshop, OKC
- ▶ 10th: OK-FIRE Workshop, Altus
- ▶ 11th: Mesonet Steering Committee Meeting
- ▶ 16th: OK-FIRE Workshop, Stillwater
- ▶ 16th: MakerFaire, Irving Middle School, Norman

Tweet of the Month

October 4 - @themabler - 5 @OKmesonet stations that start with B dropped to 33° this morning. Blackwell, Burneyville, Burbank, Buffalo, and Beaver! #okwx

Find us on   

CONTACTS

Accessing recent (within the past 7 days)
Mesonet data

Contact: [Mesonet Operator](#)

Instrumentation, telecommunications, or
other technical specifications

Contact: [Chris Fiebrich](#)

Mesonet agricultural data and products

Contact: [Al Sutherland](#)

Mesonet meteorological data

Contact: [OCS Data Requests](#)

Earthstorm - K-12 educational outreach

Contact: [Andrea Melvin](#)

OK-First - Public safety outreach

Contact: [James Hocker](#)

OK-FIRE - Fire management outreach

Contact: [J.D. Carlson](#)

Not sure?

Contact: 405-325-2541 or [Chris Fiebrich](#).

FORECAST FOR NOVEMBER

[Click here to view the original maps from the Climate Prediction Center.](#)

DISCUSSION: Equal chance for above normal, normal or below normal temperatures statewide. Chance for above normal precipitation statewide.

Equal chance for above normal, normal or below normal temperatures across the state and a chance for above normal precipitation statewide.