

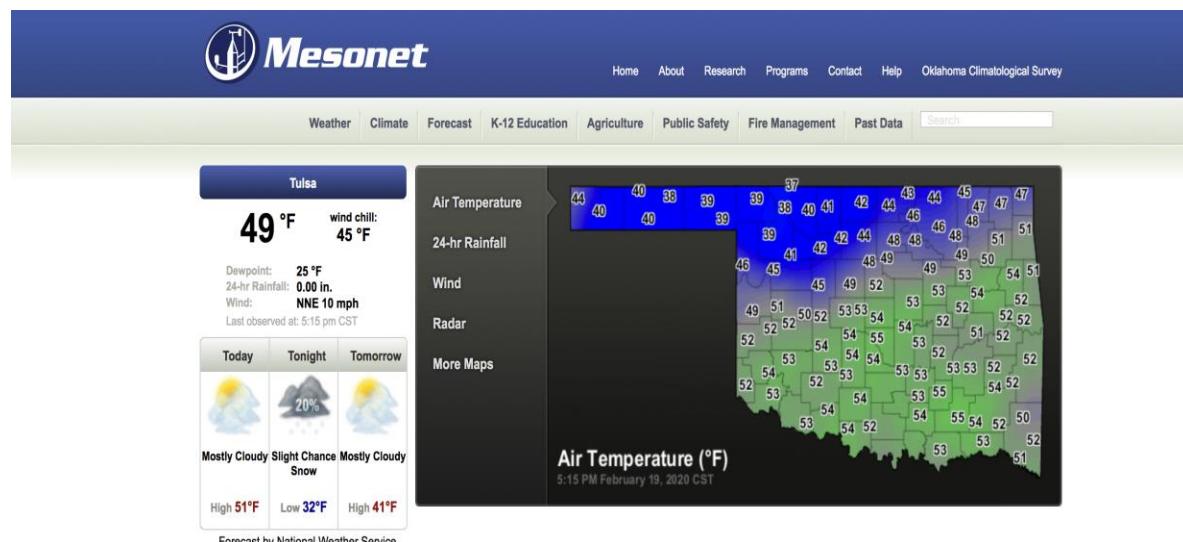
THE MESONET

Spring is almost here, and we are all anxious to get back to doing what we love most, working in our gardens. How soon can I start planting? What is the soil temperature in my area? Is the soil wet or dry? What's the latest on our famously changeable weather? We are in luck! Here in Oklahoma the answer to all these questions, and many more, is available 24/7 on the Internet at the Oklahoma Mesonet site at <http://www.mesonet.org>. An App for the site is also available from Apple and Google for your smart phone.

Mesonet is a combination of the words mesoscale and network. Mesoscale refers to weather events that measure anywhere from about a mile to about 150 miles and last anywhere from a few minutes to several hours. Network is an interconnected system. Some weather events are in such a small area that they would be missed without densely spaced weather observations.

Designed and implemented by scientists from Oklahoma State University and the University of Oklahoma, the Mesonet is a network of 120 automated environmental monitoring stations throughout the state. There is at least one station in each county and each station takes measurements every five minutes. These measurements are combined into "observations" which are sent to the Oklahoma Climatological Survey every five minutes so the data you see on the website is never more than five or ten minutes old. To see data for the station nearest to you, click on the city and type in your zip code. There are five stations in the Tulsa area, Tulsa, Bixby, Hectorville and Inola.

The **Mesonet Home Screen** gives you a quick look at the weather forecast for the next 24 hours.



For greater detail, the **Weather** tab is where you will find links to many facts including soil temperature and moisture information - particularly good things to know before you head out to plant those seeds. The right soil temperature is a key factor in successful gardening. Cool season vegetables like radishes and carrots germinate best when the soil temperature at least 45 degrees Fahrenheit. Warm season vegetables (e.g. green beans) germinate best when the soil is at least 60 degrees Fahrenheit.

 **Mesonet**

Home About Research Programs Contact Help Oklahoma Climatological Survey

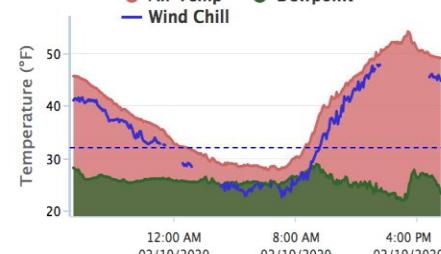
Weather Climate Forecast K-12 Education Agriculture Public Safety Fire Management Past Data Search

Tulsa Current Conditions at 5:20 pm CST Change Mesonet Site Site Information Share Tweet

49 °F Dewpoint: 25 °F
Humidity: 38%
24-hr Rainfall: 0.00 in.
Wind: NNE 8 mph
Wind Gusts: 12 mph
Pressure (MSLP): 30.31 in.
Solar Radiation: 59 W/m²

wind chill: 46 °F Sunrise: 7:08 am
Sunset: 6:08 pm

Temperature (°F) Air Temp Dewpoint Wind Chill



12:00 AM 02/19/2020 8:00 AM 02/19/2020 4:00 PM 02/19/2020 www.mesonet.org

Forecast at a Glance for Tulsa

Today	Tonight	Tomorrow	Tomorrow Night	Friday	Friday Night	Saturday	Saturday Night	Sunday
 Mostly Cloudy	 20% Slight Chance Snow	 Mostly Cloudy	 Clear	 Sunny	 Mostly Clear	 20% Slight Chance Rain Showers	 60% Rain Showers Likely	 80% Rain Showers
High 51°F Wind E 6 mph	Low 32°F Wind NE 7-12 mph	High 41°F Wind NE to N 13-16 mph	Low 20°F Wind N 3-13 mph	High 47°F Wind NE to S 3-6 mph	Low 33°F Wind S 6-7 mph	High 51°F Wind S 9-13 mph	Low 41°F Wind S 10-12 mph	High 52°F Wind S 12-16 mph

From the **Climate** tab you can access Oklahoma's long-term weather averages and extremes as well as longer-range temperature and precipitation outlooks by county. You will find links to additional state and national agencies and websites offering climate and weather information.

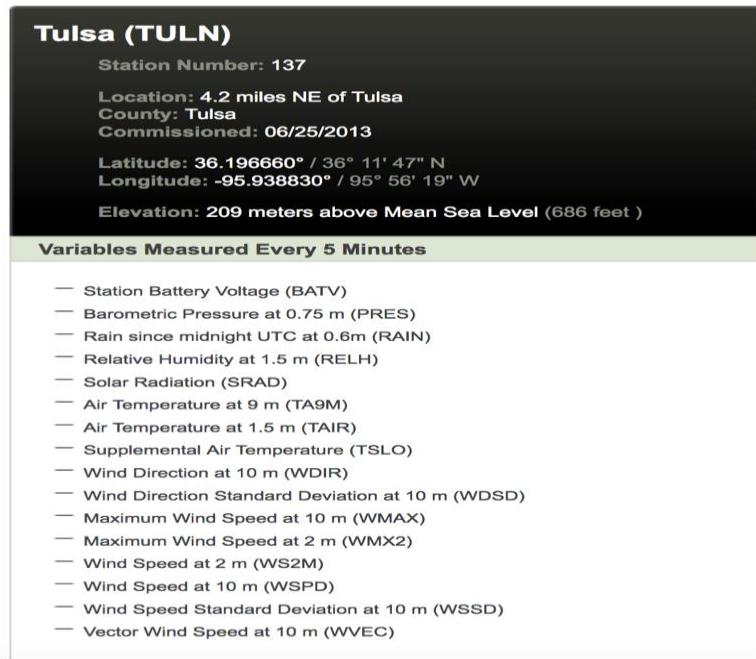
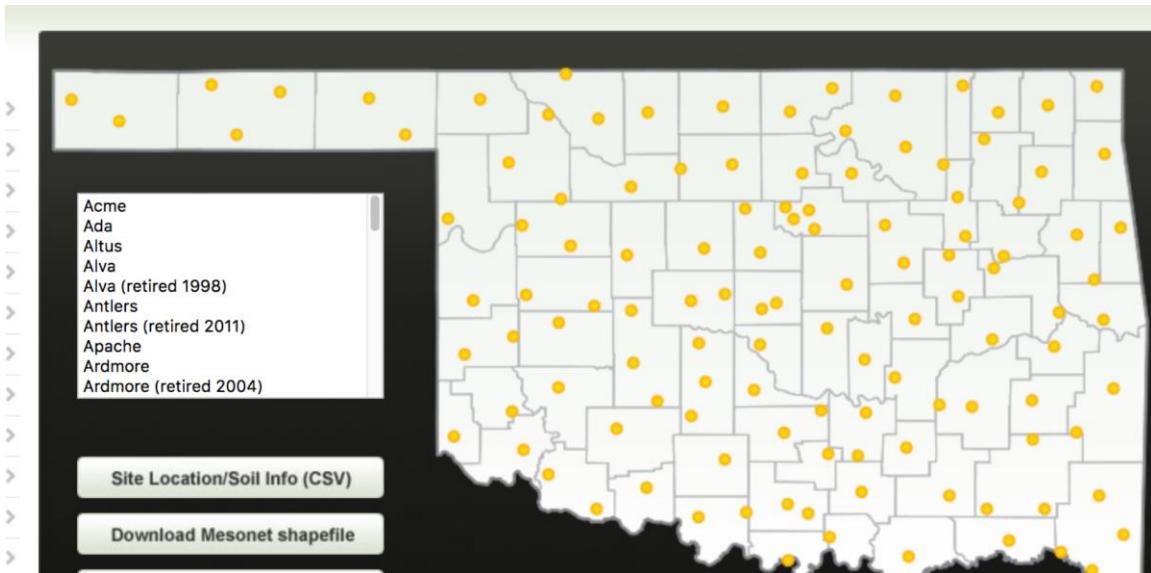


The screenshot shows the 'Local Data' section of the Oklahoma Climatological Survey website. The top navigation bar includes links for Home, About, News, Contact, and Oklahoma Mesonet. Below the navigation is a horizontal menu with Climate, Weather, Research, Outreach, and Reports. A search bar is also present. The main content area is titled 'Local Data' and contains a 'Summary Information' section. On the left, a sidebar lists links for Oklahoma Climate, Local Data, Tornadoes & Severe Storms, Drought & Wildfire, Extreme Heat & Cold, Outlooks, Reports & Summaries, and Links & Resources. The 'Climate Facts by County' section is described as leading to a page with data from the National Weather Service Cooperative Observer Program and the Oklahoma Mesonet, providing quick climate facts and detailed data for each county.

The **Past Data** tab will take you to the Mesonet site map. Click Mesonet Site on the left side of the page and choose the monitoring station closest to your location.



The screenshot shows the Mesonet website. The top navigation bar includes Weather, Climate, Forecast, and K-12 Education. Below the navigation is a horizontal menu with Past Data, Data Access & Pricing, Data Descriptions, Mesonet Sites, and Data Request Form. A red circle highlights the 'Past Data' button. The main content area is titled 'Past Data' and features a graphic showing a line graph with data points. Below the graphic is the text 'Mesonet Past Data & Files' and a 'learn more' link.



The Oklahoma Mesonet is a one-stop information website with lots of real time information. It's great to have such a handy garden tool and you don't even have to sharpen it!

You can get answers to all your gardening questions by calling the Tulsa Master Gardeners Help Line at 918-746-3701 or by emailing us at mg@tulsamastergardeners.org.