

THE MESONET: A VERY HANDY GARDENING “TOOL”

Winter is really here with wind, snow, record setting cold temperatures and maybe a case of cabin fever, too. We are all anxious to get back to doing what we love most, working in our gardens. When can I start planting? What is the soil temperature in my area? Is the soil too wet or dry? What is 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.

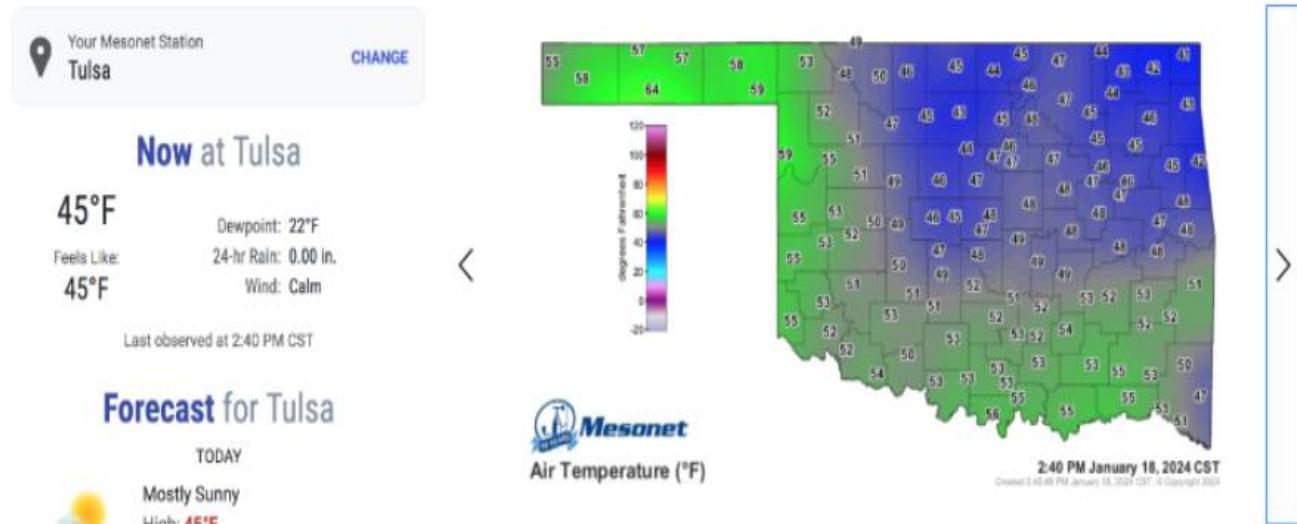
Mesonet is a combination of the words mesoscale and network. Mesoscale refers to weather events that measure anywhere from about a mile to about 150 miles and last anywhere from a few minutes to several hours. Network is an interconnected system.

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 5 to 30 minutes. Some weather events are in such a small area that they would be missed without densely spaced weather observations. 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 a few minutes old.

The Mesonet Home Screen gives you a quick look at the weather forecast for the next 24 hours, as shown below.

Mesonet
35 YEARS

Weather Forecast Past Data Climate Agriculture K-20 Education Fire Management Public Safety Research About More



The Weather tab menu is where you will find current humidity, dew point, precipitation, soil temperature, and moisture information in the last 24 hours. – all particularly good things to know before you head out to plant.

Weather

Most Popular



Local Weather



Radar



Rainfall

Products



Advisories



Air Temperature



Dewpoint & Humidity



Human Comfort



Pressure



Soil Moisture



Soil Temperature



Solar Radiation & Satellite



Station Meteograms



Station Plots



Upper Air



Wind

The right soil temperature is a key factor in successful gardening. Cool season vegetables like radishes and carrots germinate best when the soil temperature is cooler - between 40- and 70-degrees Fahrenheit. Warm season vegetables like green beans germinate best when the soil is at least 60 degrees Fahrenheit (70-80 is optimum). It will be a few weeks before we get there!

On the Local Weather tab is the five-day forecast from the National Weather Service. You can access the NWS web page from here:



Current Watches and Warnings

Wind Chill Advisory

until 12:00 PM CST Jan 19

from NWS Tulsa, OK

Forecast for Tulsa

TODAY	TONIGHT	TOMORROW	TOMORROW NIGHT	SATURDAY	SATURDAY NIGHT	SUNDAY	SUNDAY NIGHT	MONDAY
Mostly Sunny	Partly Cloudy	Mostly Sunny	Mostly Clear	Mostly Sunny	Partly Cloudy	Mostly Cloudy	Chance Rain/Freezing Rain	Rain Likely
High: 45°F	Low: 14°F	High: 25°F	Low: 8°F	High: 25°F	Low: 15°F	High: 37°F	Low: 31°F	High: 39°F
Wind: NW 6 mph	Wind: NW to N 6 to 22 mph	Wind: N to NW 9 to 17 mph	Wind: N to 8 mph	Wind: N to NE 7 to 8 mph	Wind: E to SE 6 to 7 mph	Wind: SE to S 15 to 17 mph	Wind: S 17 mph	Wind: S to SE 14 to 15 mph

Forecast by the National Weather Service

View the full NWS forecast: [Text](#) [Hourly Graph](#) [Hourly Table](#)

Station information

To find your Mesonet site, choose the Past Data tab and click on Mesonet Sites.

The screenshot shows the Mesonet website with a blue header. The header features the Mesonet logo (a stylized building with a '30 YEARS' banner) and the word 'Mesonet'. To the right of the logo are links for Home, About, Research, Contact, and Oklahoma Climatological Survey. Below the header is a navigation bar with links for Weather, Climate, Forecast, K-12 Education, Agriculture, Public Safety, Fire Management, and Past Data. The 'Past Data' link is highlighted. The main content area has a dark header 'Past Data'. On the left, a sidebar lists 'Past Data', 'Data Access & Pricing', 'Data Descriptions', 'Mesonet Sites', and 'Data Request Form'. On the right, there are two small images of data graphs. At the bottom, there are links for 'Mesonet Past Data & Files' and 'Climate Data'.

Past Data

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

Mesonet Past Data & Files

learn more

Climate Data

learn more

Mesonet Sites



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 located in Tulsa, Bixby, Hectorville and Inola.

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 Oklahoma Climatological Survey website. The top navigation bar includes links for Home, About, News, Contact, and Oklahoma Mesonet. The main menu on the left includes categories like Oklahoma Climate, Local Data, Tornadoes & Severe Storms, Drought & Wildfire, Outlooks, Reports & Summaries, and Links & Resources. The Local Data section is currently selected, displaying a summary of climate facts by county. The text in the summary states: "The county links lead to a page that includes data from the National Weather Service Cooperative Observer Program and the Oklahoma Mesonet. Quick climate facts and longer, more detailed climate data can be found for each county. Information concerning temperature, precipitation, humidity, wind, soil, freeze data, extremes and normals can all be found in the individual county pages."

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!