

Bluestem Breezes  
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## **Kansas Mesonet**

K-State maintains quite the database of historical weather information for the state of Kansas. If you're ever interested in knowing how good we've had it or how bad we've had it, there is a resource!

This week, State Climatologist Xiaomao Lin discusses the Kansas Mesonet:

The Kansas Mesonet ([mesonet.ksu.edu](http://mesonet.ksu.edu)), available on K-State Agronomy's Weather Data Library (WDL) web site, is a network of automated weather stations. The Kansas Mesonet consists of 47 active stations across the Kansas (including multiple local sites in Riley and Shawnee Counties). At each station, the weather variables are monitored by a set of instruments mostly mounted on either a 10-meter-tall tower or a 3-meter-tall tower, or sometimes both. Some soil sensors and rain gauges are located near the tower. The Kansas Mesonet provides nearly real-time (5 minute refresh rate), high-quality, and reliable agriculture-related weather observations in Kansas.

Every station reports a set of observations including air temperature, air relative humidity, precipitation, wind speed and wind direction, solar radiation, barometric pressure, and soil moisture contents and soil temperatures. All these observation data can be obtained through our website ([mesonet.k-state.edu](http://mesonet.k-state.edu)).

Three types of online data are available: historical weather data, weekly summary data, and yesterday's weather data. When the specific site and time period are provided, these data can be readily downloaded through the website. For the longer observations (e.g., more than 1 year) for specific sites, the Kansas Mesonet staff can provide that information to the user individually based upon the request. The contact email is [kansas-wdl@ksu.edu](mailto:kansas-wdl@ksu.edu).

In addition, the WDL provides climate information dating back to the 1850's, which primarily includes daily maximum and minimum temperatures, precipitation, and snowfall depth across Kansas.

We also participate in the Community, Collaborative, Rain, Hail and Snow Network, and maintain the Kansas data for this network. This is a network of community members who have their own gauges and report their observations online. This becomes particularly helpful in the winter with snowfall measurements.

For additional information on the Kansas Mesonet, stop by the Extension Office (215 Kansas, Courthouse, Alma; [kamayer@ksu.edu](mailto:kamayer@ksu.edu); 765-3821). For Bluestem Breezes archives, check out [wabaunsee.ksu.edu](http://wabaunsee.ksu.edu).