

Arizona Meteorological Network

The Arizona Meteorological Network (AZMet) has provided essential, high-quality weather data and information to a variety of stakeholders for over 37 years.

AGRICULTURE



Farmers need accurate weather data to improve irrigation, pest- and disease-management, and many other decisions.

PUBLIC SAFETY



Data from all AZMet stations go to the National Weather Service to improve severe weather forecasts.

URBAN AREAS



AZMet information on turf water use for parks, golf courses, and yards helps balance resource use and quality of life.



AZMet at work

Lower Colorado River Management

AZMet operates and maintains 12 stations in agricultural areas to support management of the Lower Colorado River by the U.S. Bureau of Reclamation.

Data Tools for Cotton Growers

AZMet's collection of online data tools includes ones for estimating cotton growth stages and heat stress.

AZMet in Real-time

The network reports the latest conditions at each station online every 15 minutes.

Animal Heat Stress

AZMet and Extension colleagues are developing resources about detrimental weather conditions for dairy cattle, other livestock, and companion animals.

Data Access and Usability

On average, almost 3,000 people per month utilize AZMet data, summaries, and tools that are freely available online.

Sustained Wind Speed

AZMet measures two-minute sustained wind speed at all network stations to support management of airbone particulate matter with a diameter of 10 micrometers or less (PM10).



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AVAILABLE DATA



AZMet measures air and soil temperature, humidity, precipitation, solar radiation, and wind direction and speed.

AZMet calculates chill hours, dew point temperature, evapotranspiration, heat units, and vapor pressure.

AZMet maintains a database of hourly and daily values of both measured and calculated variables.

A WEATHER-DATA BENCHMARK



100%

One hundred percent of hourly and daily data undergo automated and manual quality control.

8-9x PER YEAR AZMet visits each network station eight to nine times per year for inspection, maintenance, and sensor calibration.

70K PER DAY

Each AZMet station completes almost 70,000 sensor readings per day.

37 YEARS Eight long-serving stations started data collection in 1987 and now have records extending over 37 years.

AZMet currently has 32 stations across central, southern, and western Arizona.



Interested in New Stations?

In addition to identified needs, a secure location, and proper surroundings, new stations require:

- Purchase of new sensors and related equipment
- Agreement to pay an annual maintenance and operation fee

Learn more at azmet.arizona.edu



Jeremy Weiss, PhD AZMet Program Manager