

# PURDUE MESONET

The **Purdue Mesonet**, managed by the *Indiana State Climate Office*, is a statewide network of automated weather stations that monitors Indiana weather and delivers climate data, tools, data visualizations, and resources to enhance Indiana's prosperity and decision-support needs.



## Our Mission

- Monitor and assess Indiana weather and climate conditions and impacts to increase community safety, prosperity, and preparedness for extreme conditions
- Provide free, research-grade weather and climate data, derived information, data summaries, and decision-support tools
- Improve spatial coverage of a wide range of weather data in Indiana to enhance science, planning, and safety
- Increase the visibility and understanding of the value of weather and climate data and monitoring through community outreach

## Purdue Mesonet Stations



## About the Purdue Mesonet

- **Maintain weather monitoring stations across Indiana, measuring real-time**
  - Air temperature (0.5, 1.5, 2, and 3 meters)
  - Wet bulb globe temperature, heat index, and wind chill
  - Soil temperature, moisture (depths of 2, 4, 8 and 20 inches)
  - 7-day soil temperature average
  - Temperature inversion strength
  - Solar radiation
  - Relative humidity
  - Dew point temperature
  - Precipitation
  - Wind speed and direction
- **Part of the National Weather Service's National Mesonet Program**, which provides partial program support to enhance forecast data needs
- **Identifying additional Indiana sites for instrument installation**



## Contact Us

### Indiana State Climate Office

915 Mitch Daniels Blvd.  
West Lafayette, IN 47907

765-494-8060  
in-sco@purdue.edu

Indiana State Climate Office Director: Dr. Beth Hall



@INStateClimateOffice



[purduemesonet.org](http://purduemesonet.org)

The Indiana State Climate Office and the Purdue University College of Agriculture are Equal Opportunity/Equal Access/Affirmative Action institutions.

# PURDUE MESONET

The **Purdue Mesonet**, managed by the *Indiana State Climate Office*, is a statewide network of automated weather stations that monitors Indiana weather and delivers climate data, tools, data visualizations, and resources to enhance Indiana's prosperity and decision-support needs.



## Purdue Mesonet Dashboard

- Compare real-time weather and shallow soil conditions across Indiana
- Access 5-minute, 30-minute, hourly, and daily station graphs and tabular data from each station
- Available measurements:
  - Air temperature
  - Humidity
  - Soil temperature
  - Soil moisture
  - Precipitation
  - Solar radiation
  - Wind speed and direction
  - Modified growing degree days
  - Low-level inversion monitoring
- Free data access for all historical weather data from the Mesonet



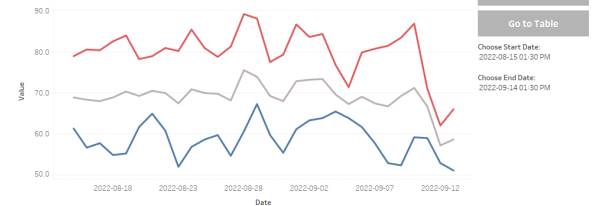
Purdue Mesonet  
Data Hub

## Future of the Purdue Mesonet

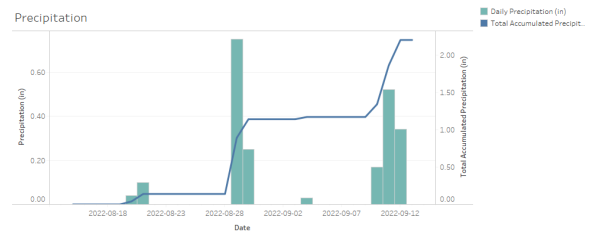
- Continue expanding the number of stations across the state of Indiana
- Develop additional monitoring and climate tools such as heat index, wind chill, potential evapotranspiration, and Wet Bulb Globe Temperature (WBGT)
- Develop value-added decision support tools such as pest and disease monitoring, departures from climatology, and integrated forecasting

Northeast PAC - Columbia City, IN

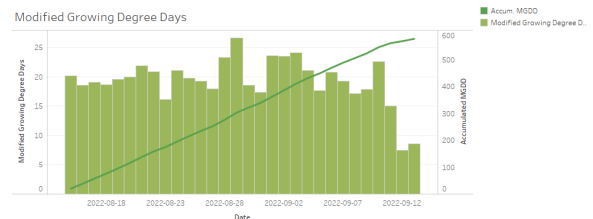
Air Temperature



Precipitation



Modified Growing Degree Days



## Contact Us

### Indiana State Climate Office

915 Mitch Daniels Blvd. West  
Lafayette, IN 47907

765-494-8060  
in-sco@purdue.edu

Indiana State Climate Office Director: Dr. Beth Hall



@INStateClimateOffice



purduemesonet.org