Host a Purdue Mesonet Station

The Purdue Mesonet, managed by the Indiana State Climate Office, is a statewide network of weather observation stations that monitor Indiana weather and deliver climate data, tools, data visualizations, and resources to enhance Indiana’s prosperity and decision-support needs.

The Purdue Mesonet’s goal is to have a weather station in every county. In addition to securing funding to purchase equipment, we are always looking for station hosts.

Weather Station

- Cost of station is $25,000, which includes:
  - (4) Air temperature sensors
  - Humidity sensor
  - Rain gauge
  - Pyranometer (sunlight)
  - Anemometer (wind speed and direction)
  - Soil moisture and temperature (4)
  - Datalogger
  - Solar panels
  - Battery
  - Cellular modem
  - 3-m tower

Site Requirements

- 10’ x 10’ area for weather station (and possible fencing enclosure)
- 60’ x 60’ open area where station is located at least 2 times the distance from the height of the tallest obstruction
- Location that is generally environmentally representative of broader area

Network Sustainability

- Program support: $6,500 per station per year
  - Staff
    - Field technician
    - Database/online tools programmer
    - Program manager
  - Services
    - Station maintenance and calibration
    - Troubleshooting
    - Data quality control and assurance
    - Public access to data via website
    - Value-added online products

Materials

- Fencing (if in public): ~$3,000
  - 10x10x8’ chain link fence around station with standard gate
- Concrete: ~$500
  - Base for weather station is 24"x24"x48"
  - Total concrete 1 yd
- Hole digger recommended