

Pennsylvania Environmental Monitoring Network

A network of weather and water observation stations being created across Pennsylvania.



Fully funded by: Penn State Office of the Vice President for Research and the Institutes of Energy and the Environment.

Commonwealth stations: In addition to the 20 sites currently being installed, we are looking for 30 additional sites for installation in the next year or two. Each station will provide 1-minute real-time observations of: 3-m wind speed and direction, 1.5 m air temperature and relative humidity, incoming solar radiation, atmospheric pressure, rainfall, soil temperature and soil moisture at 6 depths between the ground surface and 50 cm below ground, and sky conditions from a camera. All data is completely free for use and available just minutes after the observation is made.

How you could benefit: In addition to the monitoring data from your unique location, you will have access to the entire network's real-time weather and water observations. In addition to faculty and student use of data, these data will provide timely data to support facility and operations decisions regarding indoor climate control and weather related planning or emergencies.

Requirements, installation and maintenance: Installation of a 2x2x2 ft concrete pad, with equipment shown above. Stations are solar powered and use cell modems for data communications. All equipment and data warehousing is maintained by the Department of Meteorology and Atmospheric Science.

Contact: Research Professor Scott Richardson, Department of Meteorology and Atmospheric Science, if you are interested in hosting a station. srichardson@psu.edu, 814-574-3232.