

Tools for New Jersey weather and climate monitoring and analysis

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The Office of the New Jersey State Climatologist (ONJSC) at Rutgers University strives to meet the needs of individuals and stakeholder communities throughout the state who seek weather and climate information, assessments of weather and climate impacts, and a better understanding of climate variability and change. This poster will introduce several new ONJSC products and information-delivery tools, and how they provide additional context and clarity to recent weather events. They include innovative and interactive online products to display real-time and historical weather information for individual locations as well as for the entire state. Observations from an ONJSC real-time weather network of over 50 stations, a volunteer daily precipitation observing network at over 250 locations, and historical daily data from several dozen stations constitute the bulk of the data used when generating products. Timely temperature alerts can save lives during heat waves, high-resolution precipitation analyses can assist state and local officials in decision making and planning for drought mitigation, and wind climatologies can prove invaluable for analysis of pollutant transport and wind energy potential. These products demonstrate the importance of local observations and tools to best analyze and display information when addressing local and regional weather- or climate-related issues.