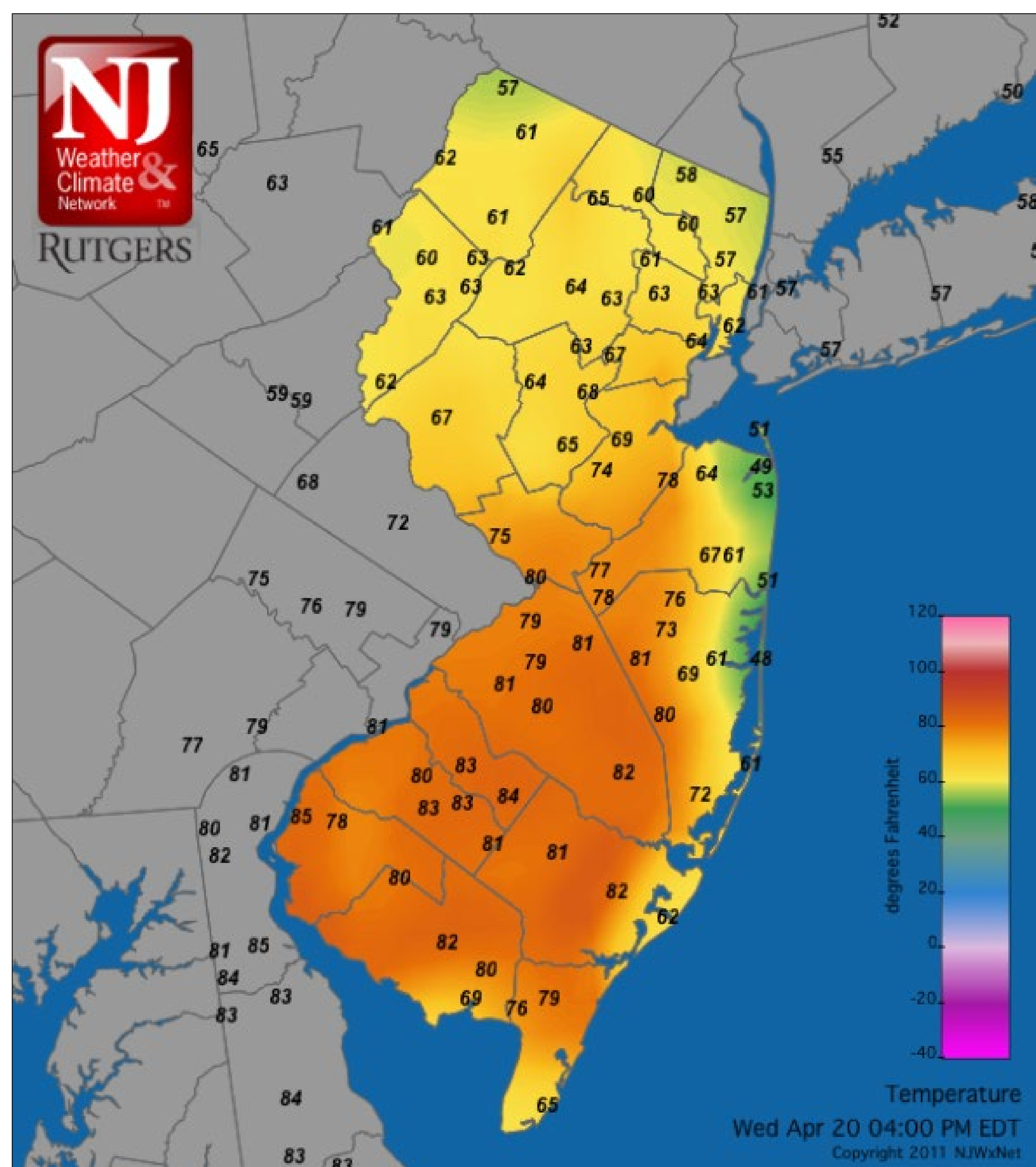


Office of the NJ State Climatologist Weather and Climate Monitoring

Mathieu Gerbush, David A. Robinson, and Daniel Zarrow

The NJWxNet

The **New Jersey Weather and Climate Network (NJWxNet)** is a unique “network of networks”, arguably the densest mesonet in the nation, here in the most densely populated state. The NJWxNet serves as a comprehensive information resource for NJ weather and climate monitoring, weather forecasting, and weather/climate-related decision making and is comprised of more than 150 weather stations. Within the NJWxNet is the NJ Mesonet network, which serves as the backbone of the NJWxNet and constitutes the most evenly-distributed, highest-quality environmental monitoring network in the state. A total of 55 NJ Mesonet and NJ SafetyNet stations are polled every 5 minutes providing near real-time monitoring of weather conditions across NJ. Data and derived products are made available in colorful maps, graphs, and tables via the NJWxNet website (<http://njwx.org>) within minutes of each observation.



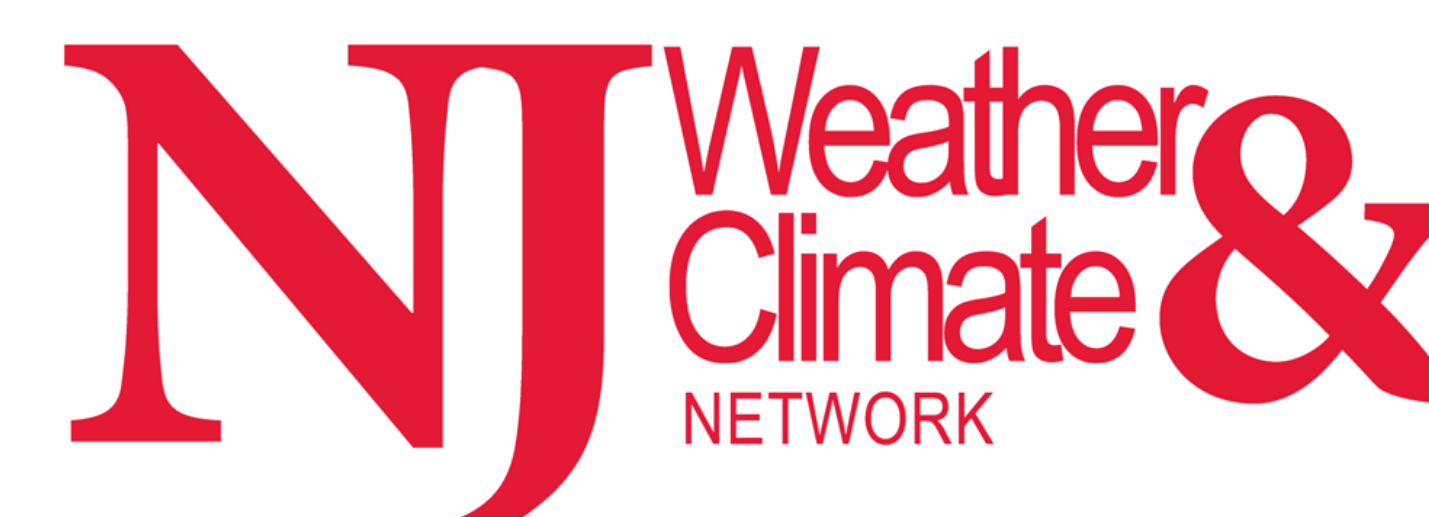
Temperature map from 4 PM, April 20, 2011



Pittstown Mesonet station at Rutgers Snyder Farm

Observations from the NJWxNet and CoCoRaHS are used by a wide variety of organizations and individuals:

- National Weather Service and private meteorologists and hydrologists
- Emergency managers
- City utility personnel (water supply, water conservation, storm water)
- Insurance adjusters
- Engineers
- Mosquito control officials
- Farmers
- Teachers and students



CoCoRaHS

The **Community Collaborative Rain, Hail, and Snow network (CoCoRaHS)** is a nationwide volunteer precipitation-observing network that welcomed New Jersey into the program in early 2008. The NJ chapter of CoCoRaHS is currently composed of over 250 active observers. All that is required to participate is a 4" diameter plastic rain gauge, a ruler to measure snow, an internet-connected computer, and most importantly, the desire to watch and report weather conditions. Measurements are then uploaded by the observer to the CoCoRaHS website (<http://www.cocorahs.org>), where they can be viewed in tables and maps. Training is provided through online training modules and in group training sessions that are held throughout the state.

228 Stations with 562 Reports over 3 Days				
Station Number	Station Name	Daily Precip Sum	Multi-Day Precip	Total Precip
NJ-CM-16	Stone Harbor 1.6 NNW	9.74	2.97	12.71
NJ-CM-25	Wildwood Crest 0.6 NNE	11.91		11.91
NJ-CM-17	Wildwood Crest 0.1 WSW	11.70		11.70
NJ-CM-2	Middle Twp 4.4 SW	11.41		11.41
NJ-CM-4	Lower Twp 2.2 NE	8.41		8.41
NJ-CM-7	Woodbine 0.8 NNW	7.87		7.87
NJ-CM-14	Upper Twp 3.2 SE	7.82		7.82
NJ-AT-3	Hamilton Twp 2.1 SE	7.57		7.57
NJ-CM-12	Woodbine 5.1 NE	7.55		7.55
NJ-CM-27	Cape May 0.4 NNW	7.28		7.28
NJ-CD-11	Vineland 2.6 WSW	7.15		7.15
NJ-AT-15	Estell Manor 5.2 NE	7.02		7.02

Top Hurricane Sandy rainfall totals measured by CoCoRaHS observers

