# NOAA/NWS Weather Prediction Center

### PROTECTING LIFE AND PROPERTY

**OUR MISSION:** WPC is a leader in the collaborative weather forecast process by delivering responsive, accurate, and reliable national forecasts and analyses.

**LOCATION:** NOAA Center for Weather and Climate Prediction in College Park, MD

**STAFF:** 27 forecasters; 5 surface analysts; 1 meteorological technician; 7 development and training staff; 3 contract staff; 6 administrative staff

BACKGROUND: The beginnings of WPC can be traced back to 1942 with the establishment of the Weather Bureau Analysis Center in an effort to coordinate with civil meteorological facilities and services for World War II purposes. In 1958, the center became part of the National Meteorological Center (NMC). The center underwent several name changes and reorganizations, eventually becoming the Hydrometeorological Prediction Center (HPC) in 1995 and the Weather Prediction Center (WPC) in 2013. Our center is continually evolving to serve our customers in the most efficient and effective manner.

WPC is a center of excellence in the prediction of highimpact precipitation events. Our forecast domain covers the entire continental United States (CONUS) as well as Alaska and Hawaii.

### WHAT WE DO

- Monitor weather conditions 24 hours per day, 365 days per year over the full CONUS.
- Forecast precipitation out through 7 days.
- Alert the threat of flash flooding within 6 hours
- Forecast winter weather, including probabilistic forecasts for heavy snow and icing, out through 3 days.
- Analyze fronts for North America every 3 hours.
- Forecast surface pressures and front locations out through 7 days.
- Forecast temperature and probability of precipitation for days 3-7.
- Forecast Alaska weather, including surface pressures and fronts, 500 mb heights, temperatures, probability of precipitation, dewpoint, cloud cover, precipitation type, and wind for days 4-8.
- Diagnose numerical model forecast errors
- Serve as official backup for the National Hurricane Center
- Train Caribbean and Central and South American scientists on WPC forecast techniques

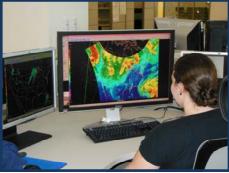




# **More About WPC**







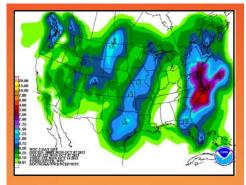
**Top:** A daytime shift at WPC. **Bottom-left:** WPC operations area. **Bottom-right:** WPC meteorologist at a workstation during Hurricane Sandy.

## **Noteworthy WPC Facts and Information**

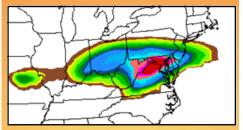
- In 2014, WPC received over 1.3 billion web hits.
- WPC issues Tropical Advisory products for tropical systems that continue to pose a flash flooding threat after landfall.
- WPC provided wind and precipitation forecasts in support of the NOAA response to the Japan earthquake and nuclear radiation hazard at Fukushima.
- The Hydrometeorological Testbed (HMT) at the WPC was established to accelerate the assessment and implementation of new technology, research results, and other scientific advancements—with a goal to enhance and extend forecast skill for high-impact precipitation events.
- The International desk trains foreign visitors from Central and South America and the Caribbean in weather forecasting. They generate forecasts for their own national centers, and assist WPC forecasters with QPF for tropical cyclones.







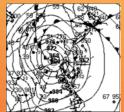
Using a combination of human expertise and objective ensemble forecasts, WPC issues Quantitative Precipitation Forecast (QPF) products out through 7 days.



WPC produces probabilistic winter weather forecasts using international ensemble models such as the ECMWF and the SREF.



WPC forecasts maximum and minimum temperatures out to 7 days.



WPC meteorologists create a surface analysis every 3 hours, using data including surface observations, ships, buoys, satellite, radar, and model

