

NOAA's Climate Prediction Center

Understanding the Present Predicting the Future

OUR MISSION

We deliver climate prediction, monitoring and diagnostic products for time scales from weeks to years to the Nation and the global community for the protection of life and property and the enhancement of the economy.

Location: College Park, Maryland

Staff: 48 federal employees; 35 on-site contracted employees; and 4 staff of the Cooperative Institute for Climate and Satellites

Background: In response to anomalous climate events in the 1960s and 1970s, NOAA organized the Climate Analysis Center (later the Climate Prediction Center or CPC) in 1979, to undertake and coordinate climate diagnostics and prediction. From these humble beginnings the CPC expanded its focus from gathering, analyzing, monitoring, and diagnosing climate data and information to providing climate predictions on time scales out to a year. Prediction of climate variability requires high quality data and models that are scientifically state-of-the-art. CPC has continually expanded its capabilities and expertise to provide users of climate information with effective climate forecast products and tools to make informed decisions.



What We Do

- Deliver official climate forecasts for the Nation - from precipitation and temperature to hurricanes and drought - on weekly, monthly and seasonal time scales.
- Monitor atmospheric, oceanic, and land-surface climate variability, including phenomena such as El Niño/Southern Oscillation, monsoons, and droughts.
- Provide diagnoses of the state of the climate system, through the monthly Climate Diagnostics Bulletin and ENSO Diagnostics Discussion, weekly hazards outlooks for the U.S. and global tropics, and seasonal attribution of climate anomalies.
- Lead ground-breaking research focused on improving climate models, understanding atmospheric and oceanic variability and predictability, attribution of climate anomalies, weather-climate linkages and forecast tool development.
- Manage the Climate Test Bed to accelerate the transition of research advances into operations, especially to support development of climate models, multi-model ensemble prediction systems, and climate products that meet user needs.
- Develop collaborative products and services both within and outside NOAA, for applications tied to drought, agriculture, and hydrology aimed at improving regional predictions to minimize risks.
- Build partnerships with national and international agencies, including the US Department of Agriculture via the "Joint Agriculture Weather Facility", and support US government actions around the globe via FEWSNET and OFDA.
- Provide climate training through the CPC International Desks, educate users of climate information, and ensure consistency with NOAA and NWS training plans.



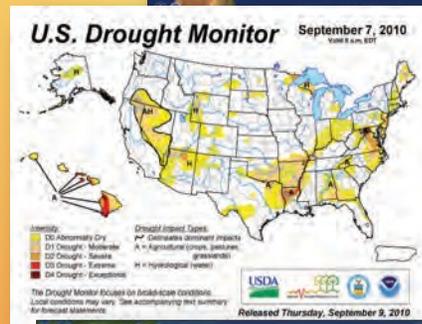
The CPC staff, pictured above, ready to support NOAA's mission and vision.



More About CPC

Recent Accomplishments:

- Delivered the CPC official climate forecasts to the Nation for 2016-2017 in support of National Weather Service goals related to the protection of life and property and the enhancement of the economy.
- Delivered extensive cutting edge and comprehensive decision support services during the 2015-2016 El-Niño and its associated impacts to CPC stakeholders.
- Led several climate workshops to advance collaborative partnerships and improve understanding of user needs, including the 41th annual Climate Diagnostics and Prediction Workshop.
- With support from the NOAA Climate Program Office and the Climate Test Bed, implemented the real-time operational North American Multi-Model Ensemble prediction tool into CPC forecast operations.
- Provided the NWS Regions and Field with briefings, tools and climate information on impacts and conditions related to recent climate extreme events such as the California drought, resulting in improved coordination of climate information across the NWS.
- Provided global leadership in the exchange of climate products, and training opportunities by partnering with other meteorological services through bi-laterals with China, Taiwan, India, Korea and Mexico.
- Developed and implemented a new verification system for CPC's operational forecasts
- Provided stakeholders with improved Arctic sea ice decision support services, allowing them to make better informed decisions regarding protection of life, property, and the environment and enhancing economic opportunities.
- Implemented improvements to the suite of drought prediction products, including the addition of a one-month outlook released on the last day of the month and modified drought outlook categories.
- Implemented an interactive web tool that provides an easy interface for users to understand the correct interpretation of its extended and long range climate outlooks.
- Implemented a Probability of Exceedance tool for the seasonal time scale that allows users to determine their own risk profile.
- Created the revolutionary tools and infrastructure to issue experimental weekly outlooks of temperature and precipitation for the combined week 3 and 4 period.



For more information on NOAA's Climate Prediction Center, please visit www.cpc.ncep.noaa.gov

