

## What is the National Weather Service?

The National Weather Service (NWS) is just one line office of the National Oceanic and Atmospheric Administration (NOAA), responsible for the forecasting of weather, record keeping of climate, and issuance of weather and water watches and warnings. The National Weather Service is mainly divided into



the Regional Headquarters for the Weather Forecasting Offices (WFOs), Central Weather Service Units (CWSUs) and River Forecast Centers (RFCs), which handle local weather, aviation weather, and water forecasting, and the National Centers for Environmental Prediction (NCEP), which are national centers that handle specific phenomena, such as space weather, severe weather, tropical weather, and climate. There are 122 WFOs and 8 NCEP centers. In addition, the NWS also consists of a variety of administrative, research and outreach offices. The NWS and NOAA are headquartered in Silver Spring, Maryland, near Washington, D.C.

## Who Works for the National Weather Service?

The NWS employs over 500,000 American scientists, with backgrounds in meteorology (study of weather), hydrology (study of water), environmental science, aviation, oceanography (study of the oceans), geography, geology (study of rocks), computer science, physics, engineering, and chemistry. The NWS also employs many in with experience in management, communication, and administration.



## Where Can I Learn More?

Visit the websites listed below to learn more about NOAA, the NWS, and NCEP.

National Oceanic and Atmospheric Administration  
<https://www.noaa.gov>

National Weather Service  
<https://www.weather.gov>

NCEP Central Operations  
<https://ncep.noaa.gov>

Aviation Weather Center  
<https://www.aviationweather.gov>

Climate Prediction Center  
<https://cpc.ncep.noaa.gov>

Environmental Modeling Center  
<https://emc.ncep.noaa.gov>

National Hurricane Center  
<https://www.hurricanes.gov>

Ocean Prediction Center  
<https://opc.ncep.noaa.gov>

Storm Prediction Center  
<https://spc.noaa.gov>

Space Weather Prediction Center  
<https://swpc.noaa.gov>

Weather Prediction Center  
<https://wpc.ncep.noaa.gov>

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## The National Weather Service (NWS)



What is the National Weather Service?  
Where is the National Weather Service?  
What does the National Weather Service do?

StormReady in a Box  
Supplemental Information Pamphlet  
NWS Twin Cities  
Chanhassen, MN

## NCEP Centers

### The Aviation Weather Center

The Aviation Weather Center (AWC) issues weather warnings and forecasting of importance to the aviation. The work closely with local Weather Forecast Offices (WFOs), Central Weather Service Units (CWSUs) and the Federal Aviation Administration (FAA) in order to ensure the skies are safe for commercial, private, and military aviation. The AWC is located in Kansas City, Missouri.

### The Space Weather Prediction Center

The Space Weather Prediction Center (SWPC) monitors and forecasts the environment in outer space. They monitor phenomena such as: solar wind, solar magnetic field, and the solar cycle. The SWPC is located in Boulder, Colorado.

### The Environmental Modeling Center

The Environmental Modeling Center (EMC) develops and improves numerical prediction weather, marine, and climate models. The EMC monitors the different modeling systems used by other NCEP Centers and WFOs. They also work cooperatively with universities and independent researchers. The EMC is located in College Park, Maryland, housed in the NOAA Center of Weather and Climate Prediction.

### The Ocean Prediction Center

The Ocean Prediction Center (OPC) monitors the environment over seas and oceans. The OPC issues forecasts over the Atlantic and Pacific oceans and watches interactions between the air and sea surface. The OPC is located in College Park, Maryland, housed in the NOAA Center of Weather and Climate Prediction.

## NCEP Centers

### The National Hurricane Center

The National Hurricane Center (NHC) monitors tropical cyclones (i.e. tropical depressions, tropical storms, and hurricanes) and their development. The NHC functions as the warning and forecasting source used by the Departments of Defense, Commerce, and Transportation., as well as all public and private entities in the United States. The NHC has responsibility for monitoring the Gulf of Mexico, the Northern Atlantic, the Caribbean, and the Eastern Pacific. The NHC is located in Miami, Florida.

### The Climate Prediction Center

The Climate Prediction Center (CPC) monitors the national and global climate and issues extended temperature and precipitation outlooks. In addition, the CPC also analyses and interprets climatological data. Their forecasts are used by those in a variety of industries, such as water resources, agriculture, transportation, and others. The CPC is located in College Park, Maryland, housed in the NOAA Center of Weather and Climate Prediction.

### The Storm Prediction Center

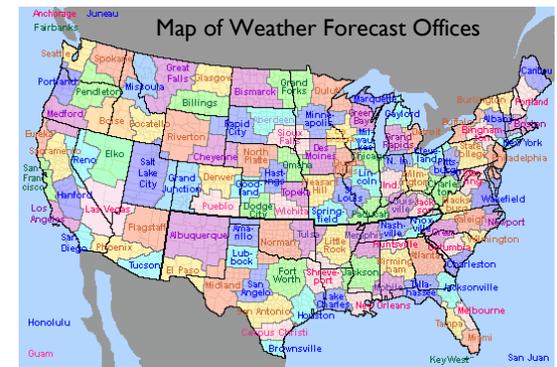
The Storm Prediction Center (SPC) provides watches and forecasts for tornadoes and severe thunderstorms across the United States. The SPC also monitors heavy rain, significant snow fall, and fire hazards. Their products are used frequently by operational meteorologists and WFOs. The SPC is located in Norman, Oklahoma on the campus of the University of Oklahoma.

### The Weather Prediction Center

The Weather Prediction Center (WPC) interprets numerical models and creates national forecasts using those models up to 10 days out. The WPC forecasts and analyses are used by local WFOs and private forecasters alike. The WPC is located in College Park, Maryland, housed in the NOAA Center of Weather and Climate Prediction.

## Weather Forecast Offices, River Forecast Centers, and Central Weather Service Units

There are 122 Weather Forecast Offices (WFOs), 12 River Forecast Centers (RFCs), and 21 Central Weather Service Units (CWSUs), that operate across the country and in the U.S territories. These local field offices of the NWS handle weather and water forecasting for the public, aviation, and private companies. The 122 WFOs are divided into regions : Central , Southern , Eastern, Western, Alaska, and Pacific. Local WFOs issue forecasts and warnings in real-time and are staffed 24 hours a day, seven days a week, every day of the year.



River Forecast Centers monitor and forecast the discharge of flow of rivers and streams across their forecast area. RFCs are frequently collocated with local WFOs near major river basins, such as New Orleans, Minneapolis, and Cincinnati.

Central Weather Service Units handle aviation forecasts and work closely with the FAA and aviation community. They are typically located near major airport hubs, such as New York and Atlanta. CWSUs cover large geographic areas and work frequently with the AWC and local WFOs.