

NOAA Partnerships

Cooperative Observer Program

The Cooperative Observer Program is a unique partnership between the National Weather Service and citizen volunteers in every U.S. state and territory. The successful 120-year-old program provides the nation with a cost-effective way to collect weather data for immediate forecasting needs and longer-term national, regional and local climate outlooks.

Program History

The program's origins date back to 1890 with Congressional passage of the National Weather Service Organic Act, which set up a system to recruit and train volunteers across the United States to become cooperative weather observers.

These observers volunteer their time to record and report weather and climate observations to the National Weather Service on a daily basis. They observe daily maximum and minimum temperature, rain and snowfall totals, and more. The data is used to support daily weather forecasts and warnings, and it continues to help build the nation's historic climate record.



Today's Cooperative Observer Program

Today, volunteers record weather and climate data at almost 10,000 sites throughout the 50 U.S. states and its

territories. The federal government provides observers with free training and equipment to set up their weather station. The National Weather Service offers additional support through equipment maintenance and site visits.

The observer's job is a great public service to local communities and to the nation. Observers check their weather instruments daily and submit the data over the phone or Internet. The data is quality controlled and then published online for everyone's use.



U.S. Historical Climatology Network

While all of the nearly 10,000 observing sites support local weather, climate and flood forecasts, data from 1,221 of them also contribute to the U.S. regional climate record. These sites, called the *U.S. Historical Climatology Network*, were selected for their unbroken record and static site location for at least 80 years.

Additional Uses of Observer Data

Up to 26 types of weather measurements are reported by observers, including soil temperature, evaporation, snow measurement and liquid equivalent of snow. Observer data at nearly 7,500 sites is one of the few sources of measuring snow and its water equivalency in the United States.

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Historical weather averages and normals for all areas of the country are determined using observer data.

Observer data help settle billions of dollars annually in insurance and legal claims,

determine federal disaster declarations for federal aid to local counties and are a major factor in determining household energy costs. These data play a critical role in efforts to determine and evaluate the extent of climate change from local to global scales.

In addition, data collected by weather observers help local officials make long-term planning decisions about water resources and are used by a variety of industries on a daily basis, including medical, transportation, agriculture, engineering and communication.

Become a Weather Observer

Anyone can become a weather observer! To learn more, visit www.nws.noaa.gov/om/coop or contact your local National Weather Service forecast office.

To learn more about NOAA, visit <http://www.noaa.gov>. 

