National Weather Service



The <u>NWS</u> Weather Forecast Office (WFO) in the Denver/Boulder region provides weather forecasts and warning to 2.5 million citizens in 22 counties in northeast and north central Colorado. Because the WFO is an operational office, it is open 24 hours a day, seven days a week. The WFO provides zone forecasts and short-term forecasts to the general public, fire weather forecasts to land management agencies, and aviation forecasts to the aviation community.

The National Weather Service Forecast Office in Boulder is one of 122 local offices across the country. Wherever you go in the United States, there is a local NWS office providing forecasts and warnings for you. The National Weather Service also has several national centers including the Space Weather Prediction Center located on the first floor of the NOAA Boulder DSRC. You might be familiar with other national centers such as the National Hurricane Center in Miami and the Storm Prediction Center in Norman, Oklahoma.

The workstations you see in this office are AWIPS systems (Advanced Weather Interactive Processing Systems) AWIPS was developed by the Forecast Systems Lab (now Global Systems Division). They are located next door in the Skaggs building. Each workstation consists of three graphics screens for analyzing data, and one text screen for viewing other forecast text, or editing forecast products.

On the workstation monitors, a forecaster can download information from the many sources bringing in data from across the globe – from satellites flying in geostationary orbit 22,500 miles above the equator and local radars tracking nearby storms to ground-based weather stations delivering temperature, humidity, pressure and other atmospheric attributes. In addition, the forecaster looks at numerical weather mod-

els, from NOAA and other science agencies, that begin with information on the current state of the atmosphere and apply it to a simulation of the Earth system and how it behaves, and can give us an idea of what's going to happen next.

Each local office is responsible for issuing forecasts for the next seven days, including all warnings and advisories. The forecasts are produced in several formats, including public forecasts, aviation forecasts, fire weather forecasts and marine forecasts.

This office serves not only rural areas on the plains to the east toward Kansas, but several of the state's larger cities, including Denver, Fort Collins and Boulder as well as the mountains and foothills to the west. The varied terrain can make for interesting forecasting challenges. This office never closes its doors, so operational staff work rotating shifts. Said one, "We get to see a lot of sunrises and sunsets. We also work a number of weekends and holidays."