

New Mexico - Would you like it Red or Green?

By David DuBois, New Mexico State Climatologist

New Mexico has a climate for just about everyone. The state is a land of diverse climate regions with elevations ranging from the lowlands of the Chihuahuan Desert to the high elevation alpine peaks. Elevations range from 2,817 feet in the south along the Pecos River to the top of Wheeler Peak at 13,161 feet high in the Sangre de Cristo Mountains. The low deserts of the south can be hot in the summer but mild in the winter. Maximum temperatures can reach 110 F in the southeast part of the state while the higher elevation towns are in the 80s just an hour drive away. The weather station at Orogrande holds the record for highest temperature of 116 F in July of 1934. Winter cold snaps can drop temperatures to below zero Fahrenheit in the mountains and in the teens or lower throughout the state. The official lowest temperature recorded is -50 F at Gavilan (Rio Arriba County) back in February of 1951.

The higher elevations receive the most precipitation with some locations in the Sangre de Cristo, San Juan, San Pedro, and Mogollon Mountains receive more than 45 inches per year. In general the central valley, south central and northwestern parts of the state are the driest. Much of this area receives less than 10 inches of annual precipitation with some stations recording less than 7 inches. For example the Newcomb Cooperative climate station in the northwest had an annual average of 5.97 inches of precipitation based on the years between 1971 and 1990.

Average annual snowfall ranges from less than an inch at the south to more than 100 inches at Northern Mountain stations. The Red River Cooperative station averaged 147 inches per year based on the data from 1906 to 2008. Snowfall may exceed 300 inches in the highest mountains of the north. Snow is highly variable in the mountains with some parts receiving more than a foot and no snow on the other side. No location in New Mexico is exempt from snow but the lowlands deserts of the south rarely see any snow accumulation.

Many locations receive most of their annual precipitation during the summer monsoon season. Each year moisture rich air masses from the eastern Pacific, Gulf of California and the Gulf of Mexico bring in ingredients for the monsoon. Thunderstorms in summer can cause short but intense rainfall and can be highly localized.

Severe weather in the form of tornados are most frequent from May to August when moist air masses from the Gulf of Mexico move inland and encroach the eastern part of the state. Most tornados in the southern part of the state occur in the summer from June to August.

The spring is the time for frequent wind storms. High winds are highest in gaps between mountains and on ridge tops where they occasionally can reach speeds of more than 90 miles per hour, similar to that in hurricanes.

For more information on New Mexico's Climate please visit the New Mexico Climate Office at: http://weather.nmsu.edu/