

New York's Climate

THE COCORAHS 'STATE CLIMATES' SERIES

I Love NY's Climate Zones!

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The climate of New York State is considered to be that of a humid continental zone. However, the complex topography of the state, which consists of 49,576 square miles of land, 1,637 square miles of inland water, and elevations that range from sea level in the southeast to 4,000 to 5,000 feet in northwestern Essex County, provides a wide range of weather conditions from region to region.

The state is divided into ten climatic divisions ranging from the Coastal regions of Long Island and New York City, to the Northern Plateau region (which has the highest point, Mount Marcy, reaching a height of 5,344 feet above sea level), to the Central Lakes region (which contains the Finger Lakes), and the Great Lakes Region, stretching from Buffalo to Watertown, famous for its lake-effect snow events.

The annual average temperatures range from 55° F across the Coastal region to 40° F across the Adirondacks in the Northern Plateau region. The highest temperature of record in New York State is 108° F at Troy on July 22, 1926, and the record coldest temperature is 52 degrees below zero at Stillwater Reservoir (northern Herkimer County) on February 9, 1934 and at Old Forge (also northern Herkimer County) on February 18, 1979. Annual average precipitation (rain plus the water equivalent of snow) varies from 54 inches in the Adirondacks to 35 inches across the Finger Lakes region. The Catskills average of 47 to 50 inches of precipitation helps fill the reservoirs that supply fresh water to 19.1 million people in the New York City area. Annual snowfall peaks at more than 175 inches on the western and southwestern slopes of the Adirondacks, with a secondary maximum of 130-160 inches along the Lake Erie shoreline. Lake-effect snow bands in the Great Lakes and Central Lakes climate divisions yield snow totals that range from 30-120 inches.

The different climate divisions of New York State support a wide variety of agriculture crops. Around 850,000 acres of corn is produced, mostly in the Great Lakes and Western Plateau divisions. Apple and other tree-fruit productions are concentrated along the shores of Lake Ontario and in the Hudson Valley. The Great Lakes and Central Lakes climate divisions are leading producers of grapes for the wine and juice industry, generating \$3.76 billion for New York's economy. The sugar maple tree finds a climate optimum for growth throughout upstate New York, with the 2009 syrup production estimated at 362,000 gallons worth \$15.3 million.

In order to support a rapidly growing agricultural industry and the need for fresh water for agricultural and urban areas, a denser network of precipitation is needed. The CoCoRaHS network can provide a detailed record of the large variations in rainfall and snowfall over relatively short distances.

More information about New York's climate can be found at the New York State Climate Office:
<http://nysc.eas.cornell.edu/>