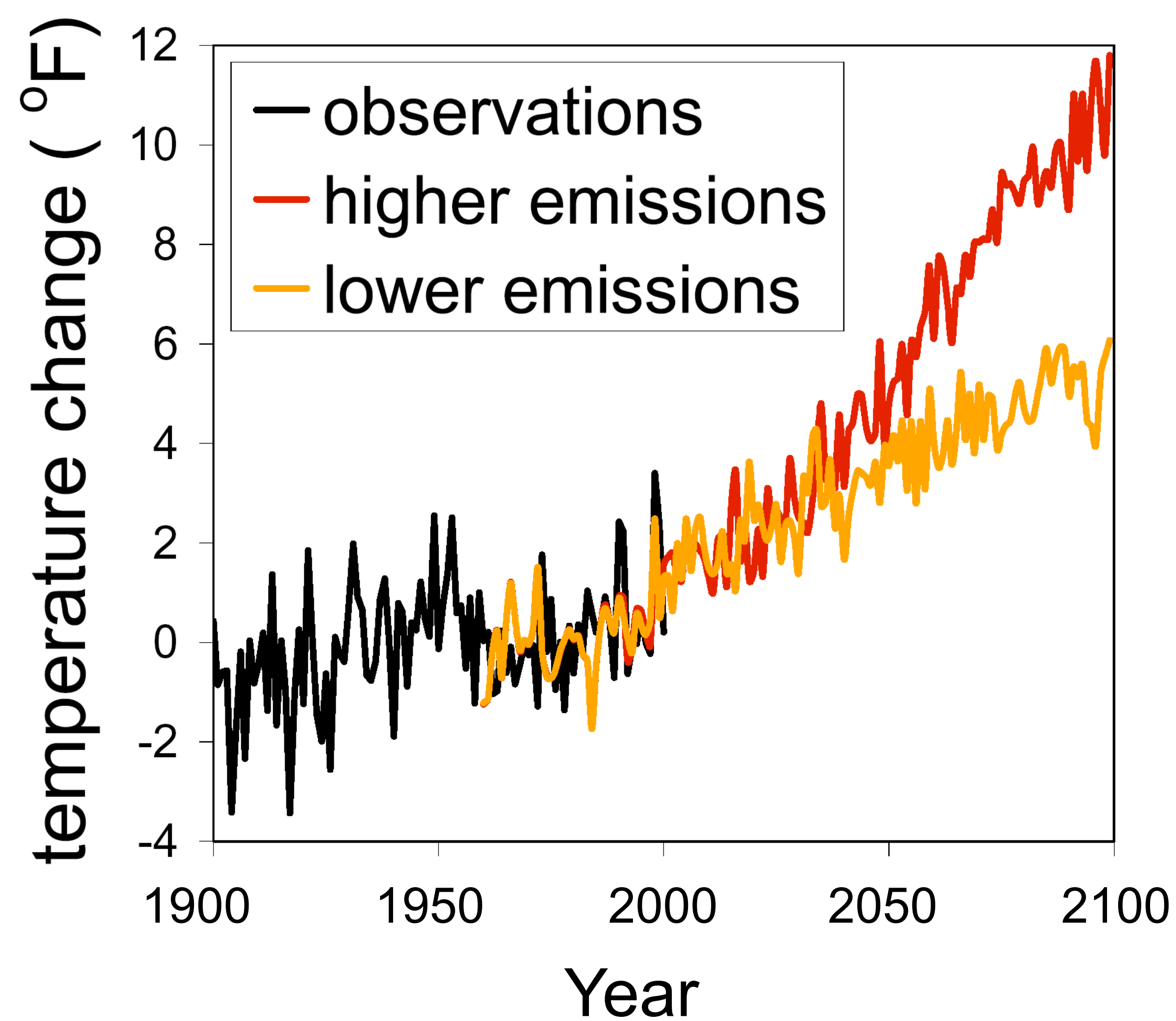


Climate Change in the Northeast

Getting warmer...

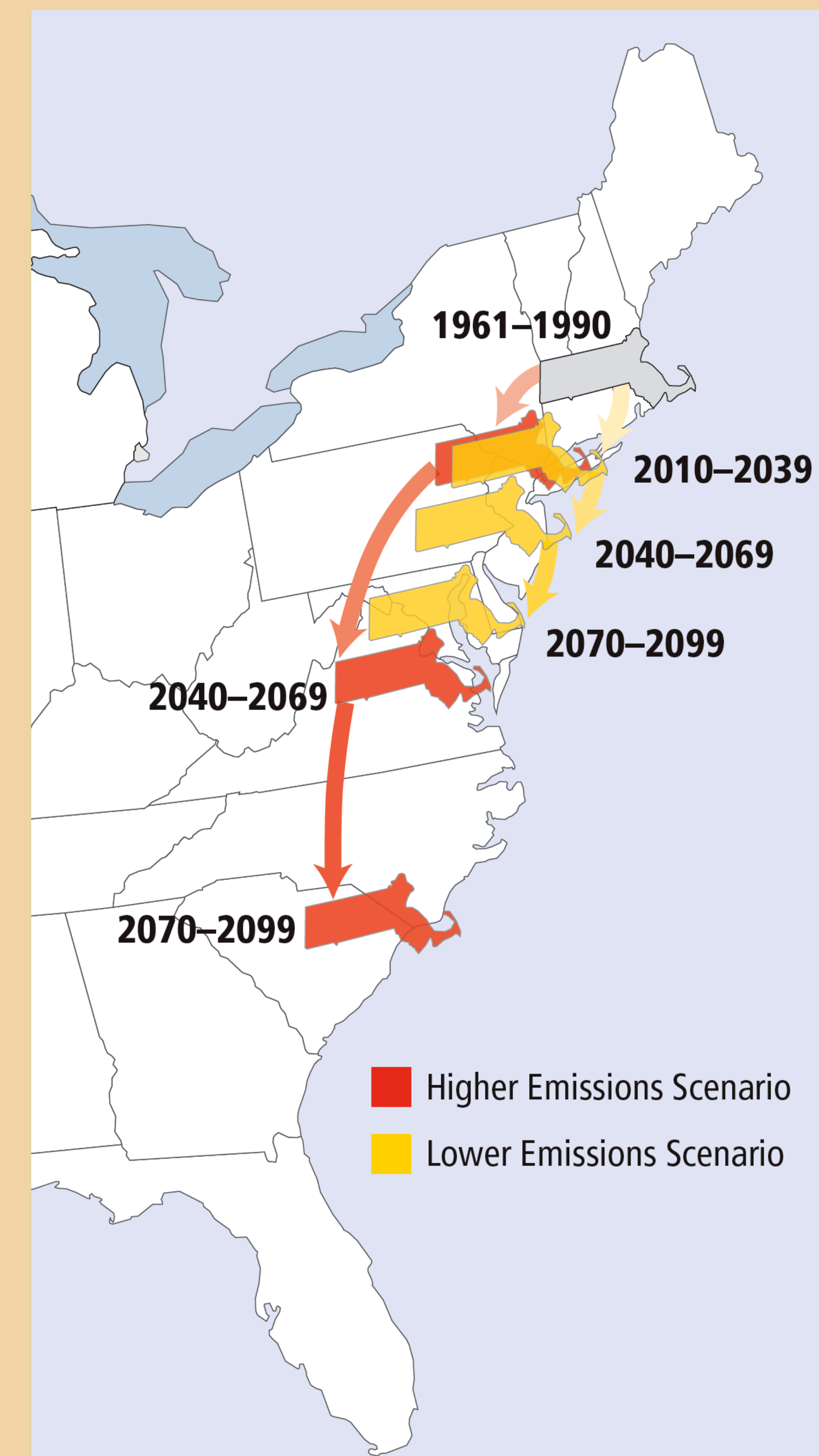
The average annual temperature in the Northeast has increased 1.5°F since 1970, at a rate of 0.5°F per decade. Winter temperatures have increased dramatically, at 1.3°F per decade. The outlook for temperature increases by the end of the century will be determined by the rate of emissions output. Under a lower-emissions scenario, average temperature in the Northeast will increase 3.5 to 6.5°F. For a higher-emissions scenario, the average temperature is projected to increase 6.5 to 12.5 °F.

Rising temperatures in the Northeast



Temperature increases could lead to longer “low flow” periods in rivers and streams, and a greater number of short- and medium-term droughts.

Summers will feel hotter

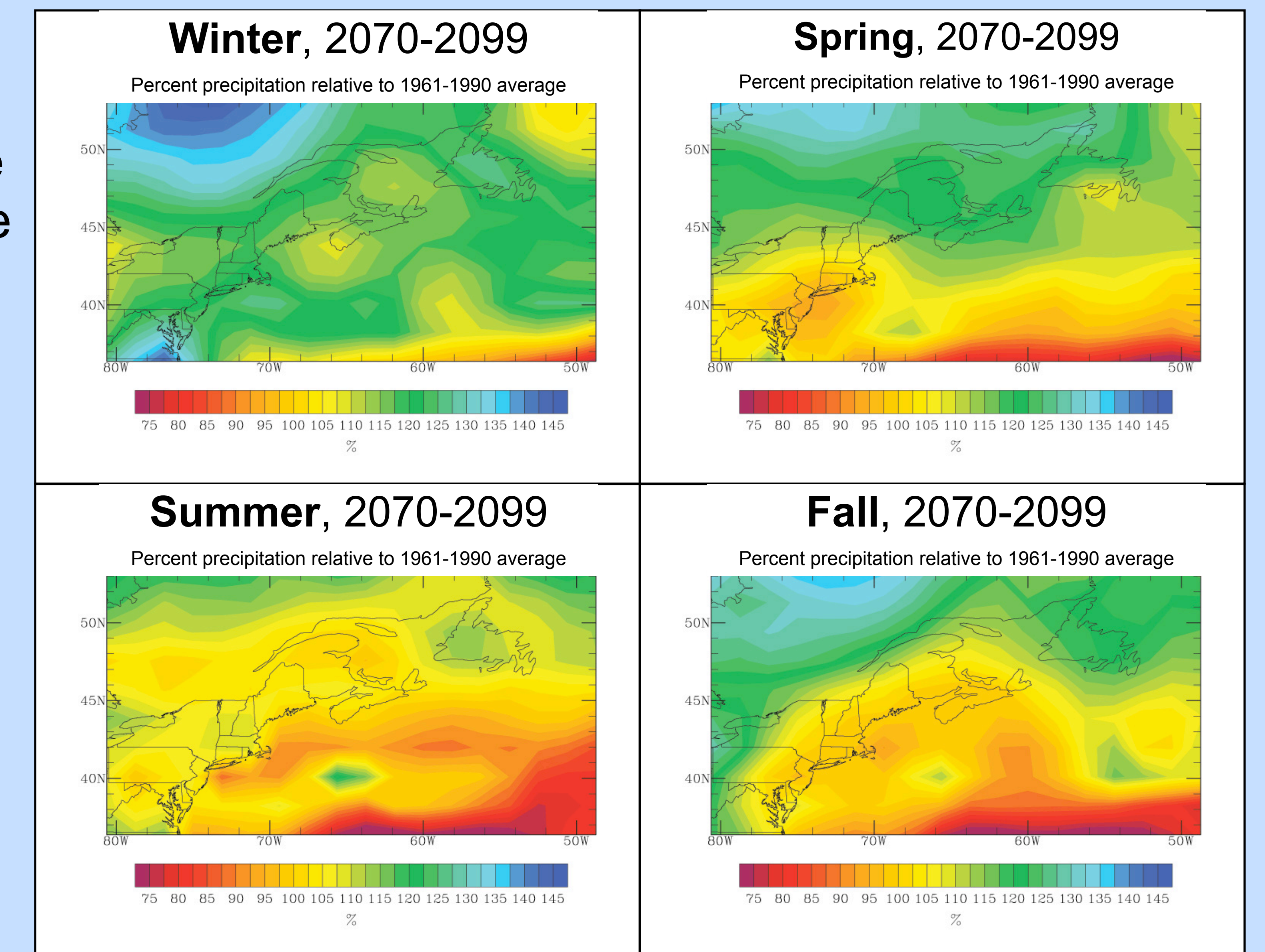


By 2100, summer in Massachusetts will feel like a current summer's day in Maryland under low emissions, or South Carolina under high emissions. Heat waves and temperature extremes (over 100°F) are also expected to increase, subjecting some of the population to increasing health risks.

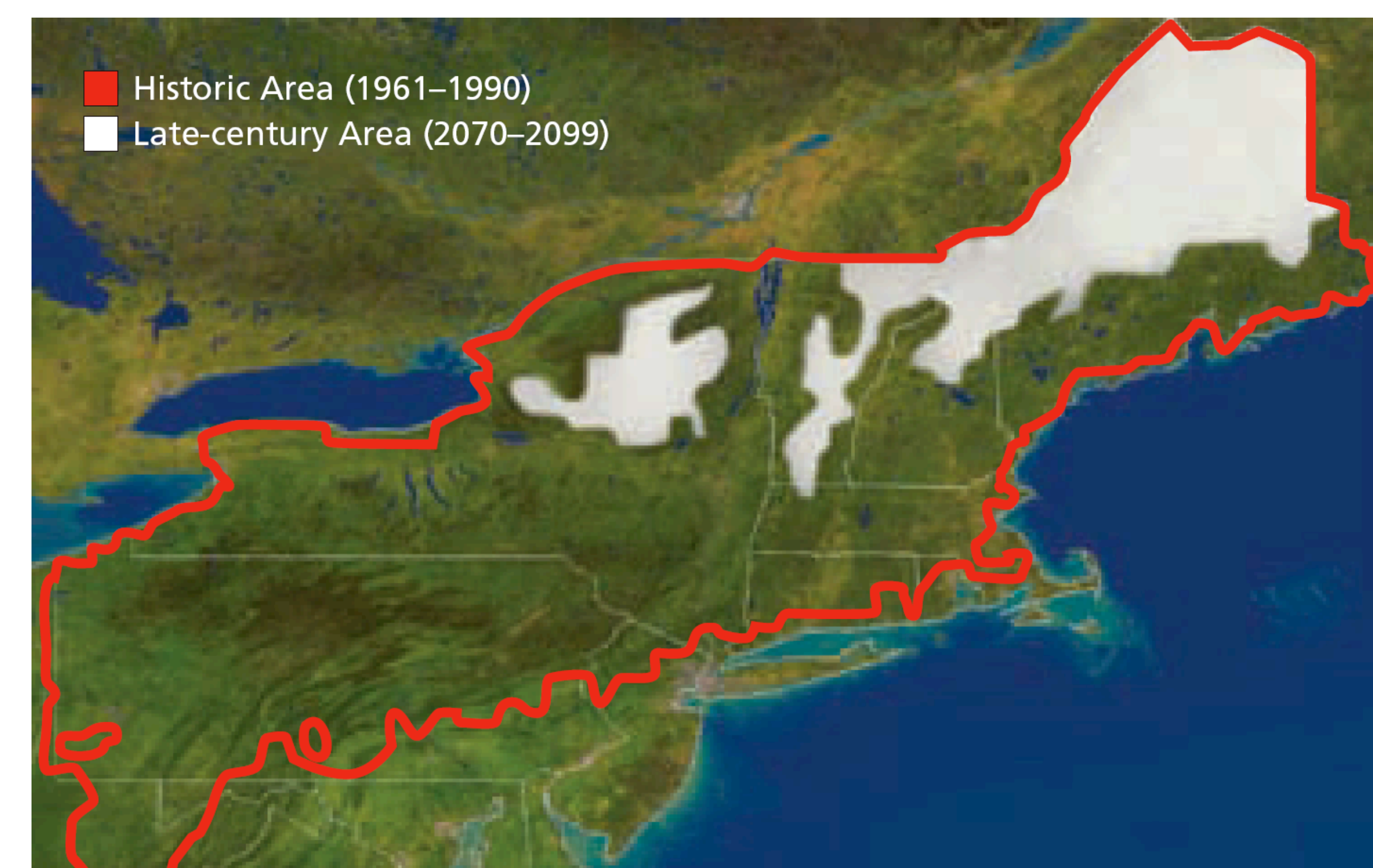
Getting wetter...

Models show an expected 7 to 14% increase of annual precipitation by the end of the century, with a larger increase for higher emissions levels. The greatest change is likely to occur in winter months, when precipitation may increase by 11% (lower emissions) to 30% (higher emissions). More winter precipitation is expected as rain and less as snow.

More precipitation expected by 2100



Less snow on the ground



"Snow cover" area above has more than a dusting of snow on the ground for more than 30 days

In the Northeast, there are fewer and fewer days with snow on the ground. This is because more winter precipitation falls as rain, and snow melts faster in warmer temperatures. By 2100, the northern part of the Northeast could lose up to one-quarter of its snow-covered days under low emissions, and more than half of its snow-covered days under high emissions.