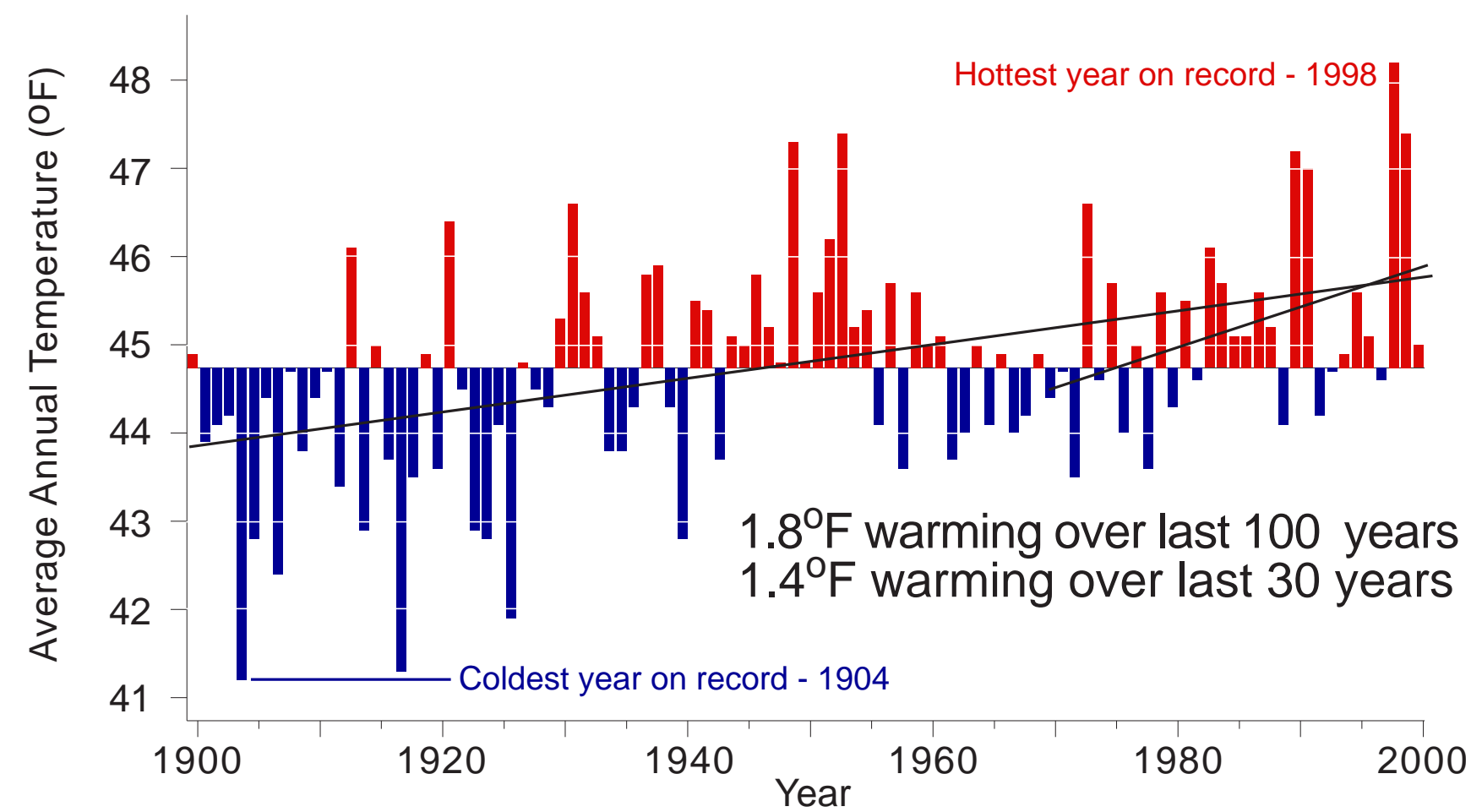


# Indicators of Climate Change in the Northeast

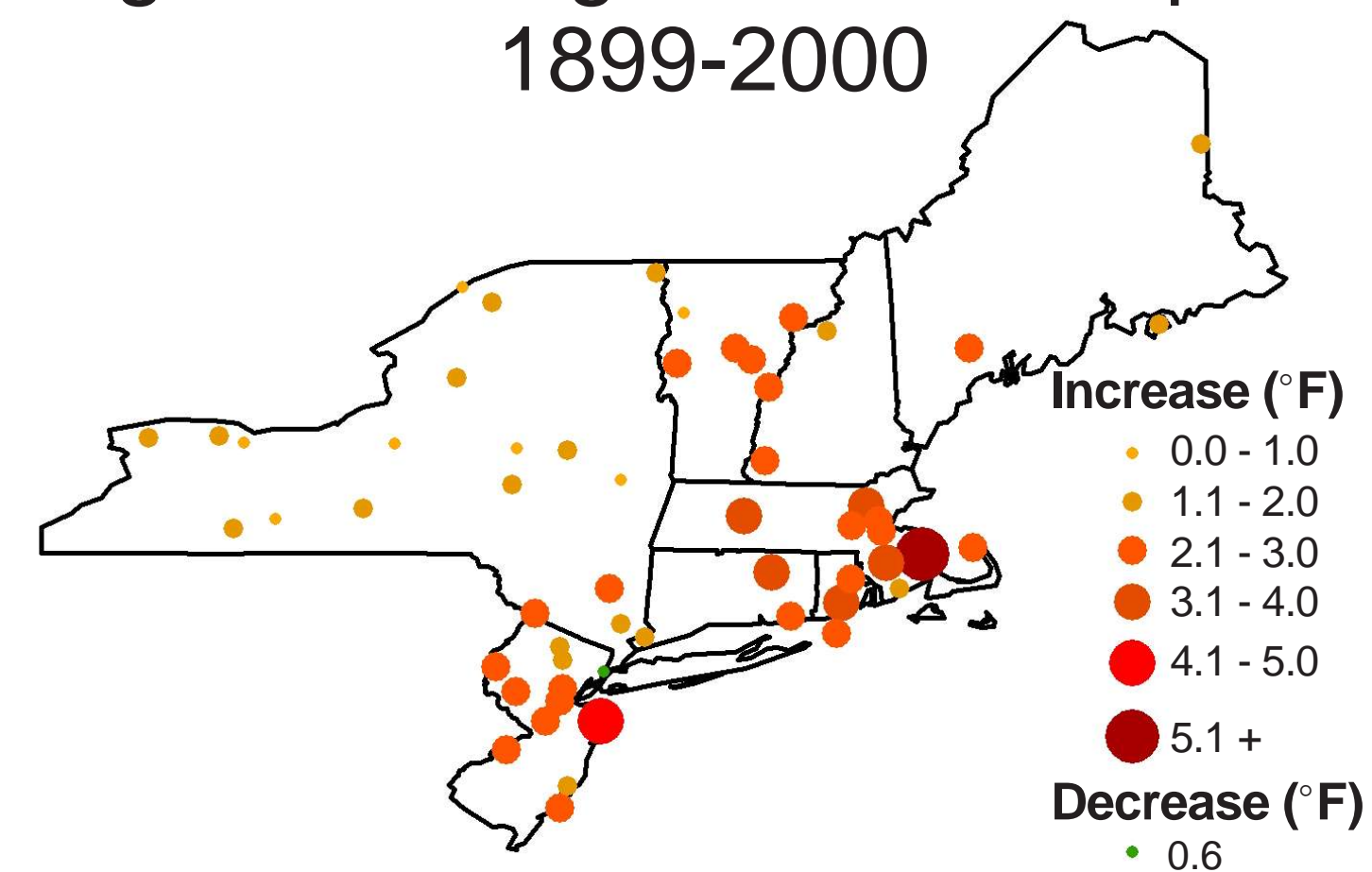
## Annual Temperature Trends

Average Annual Temperature 1899-2000



Temperature data from 56 stations across the Northeast United States. Regionally, average annual temperatures have increased by 1.8°F over the past 100 years and 1.4°F over the past 30 years. Data from NOAA National Climatic Data Center.

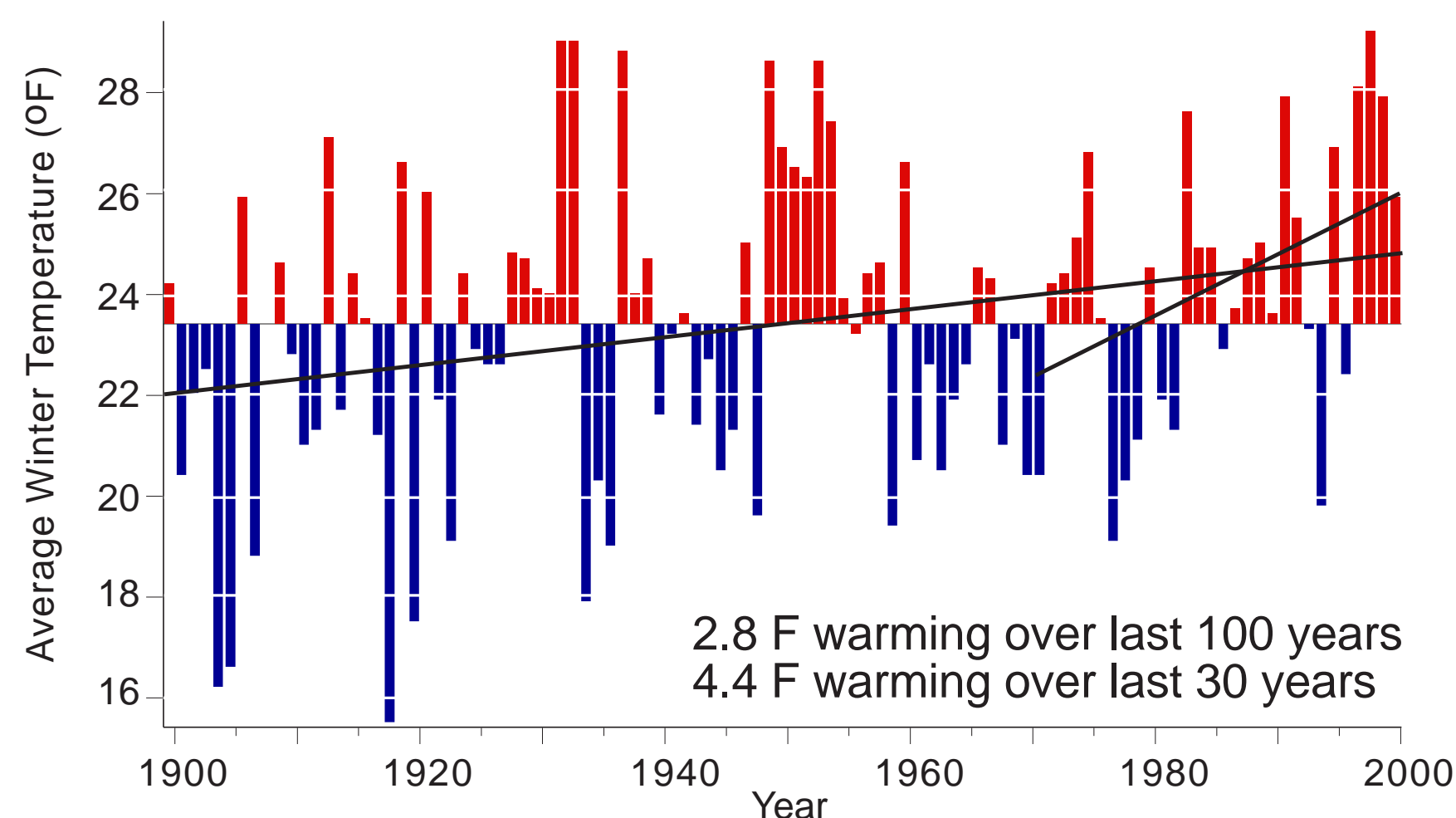
Change in Average Annual Temperature 1899-2000



The map above illustrates the linear trend in annual temperature over the past 100 years. The red dots show increase in annual temperature, while the green dot indicates an annual temperature decrease. Notice how the coastal regions have warmed more than the Northeast average increase of 1.8° F since 1899.

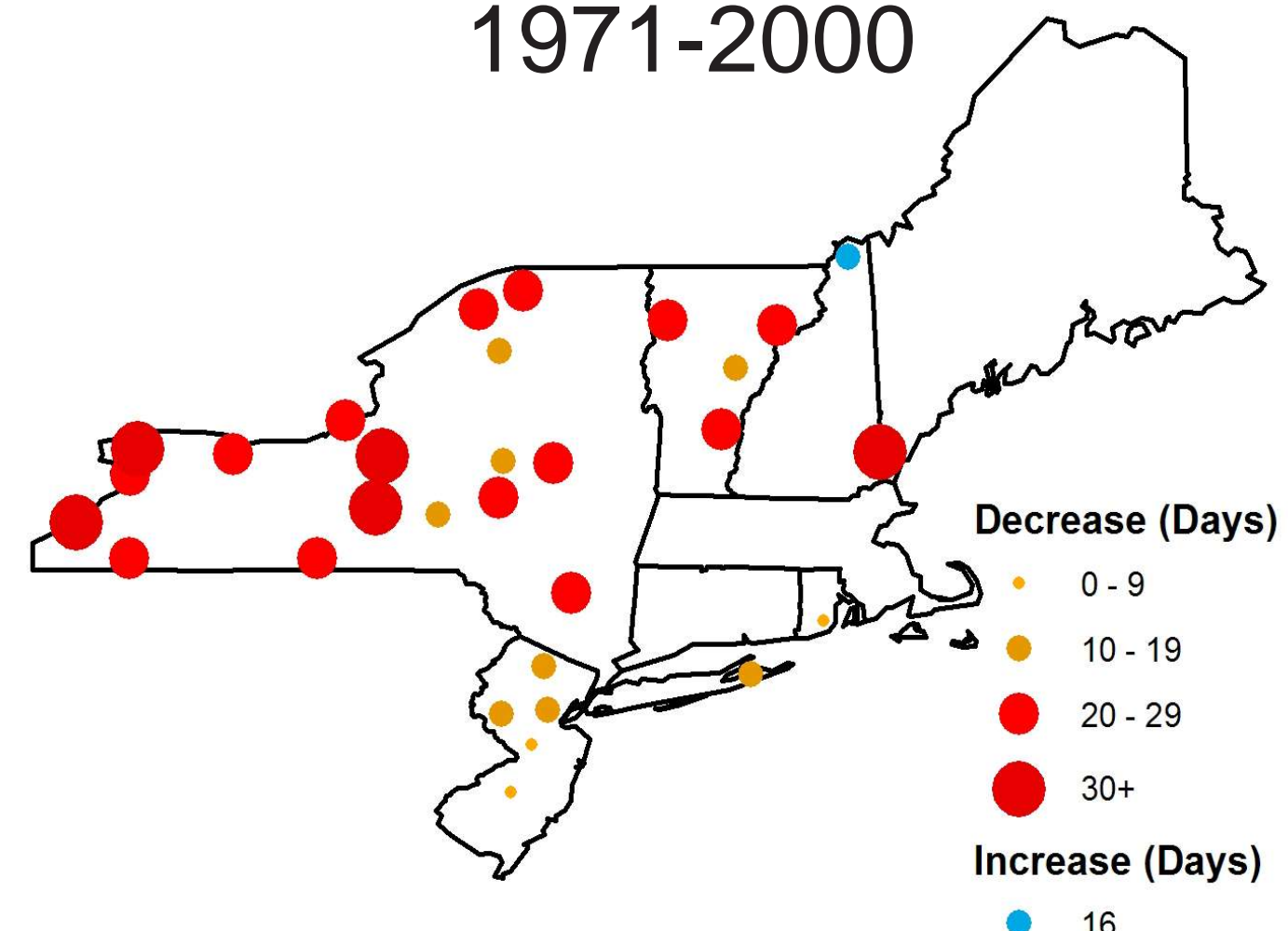
## Winter Climate Trends

Average Winter Temperature 1899-2000



The average winter temperature in the Northeast has increased by 2.8°F in the past 100 years and 4.4° F in the past 30 years. Warmer winters are likely to have adverse effects on winter tourism and the ski industry.

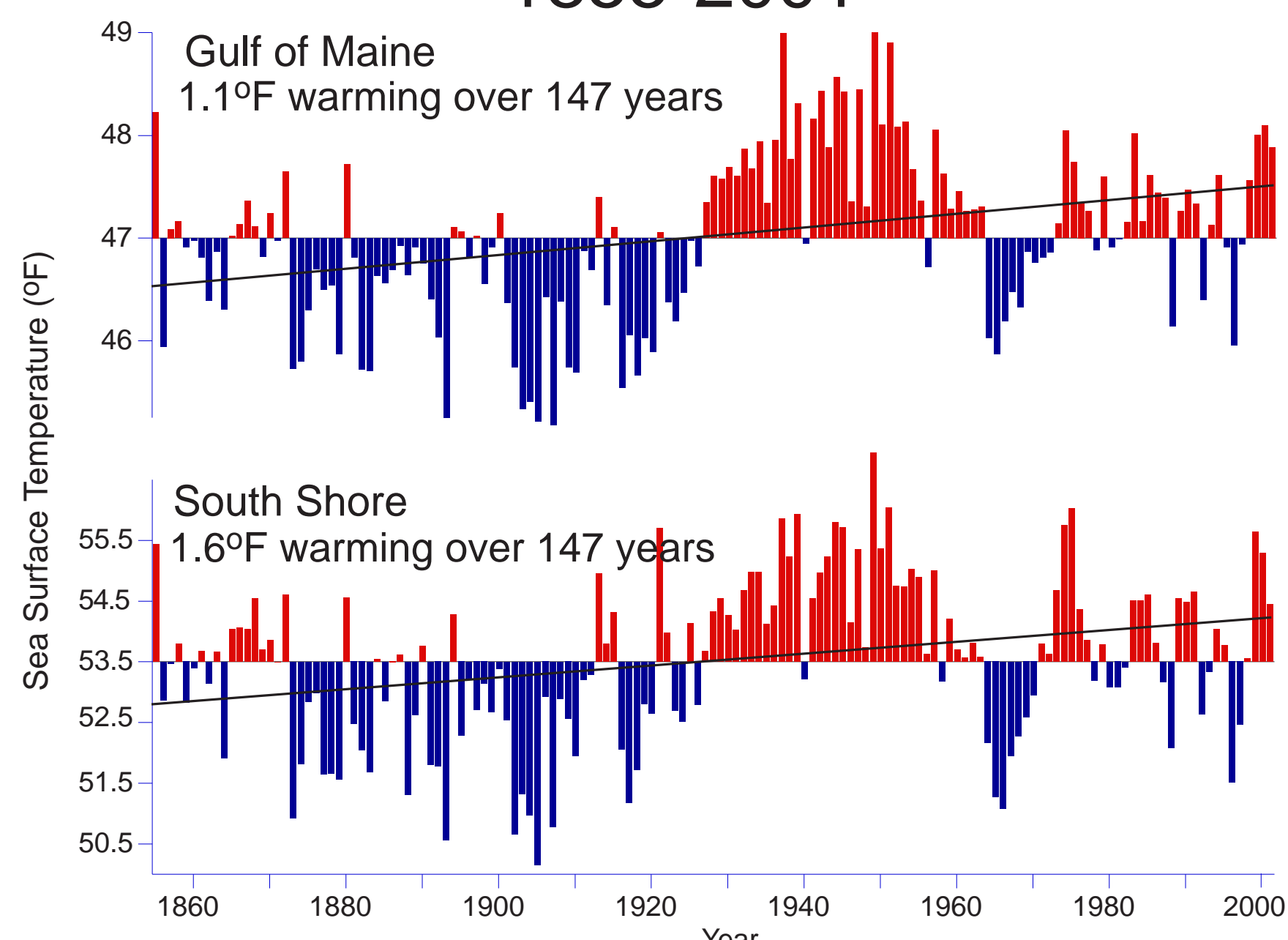
Change in Days with Snow on the Ground 1971-2000



The map above illustrates the change over the last 30 years in days with snow on the ground. Note how most New England and New York have 20-30 less days with snow on the ground in 2000 compared to 1971.

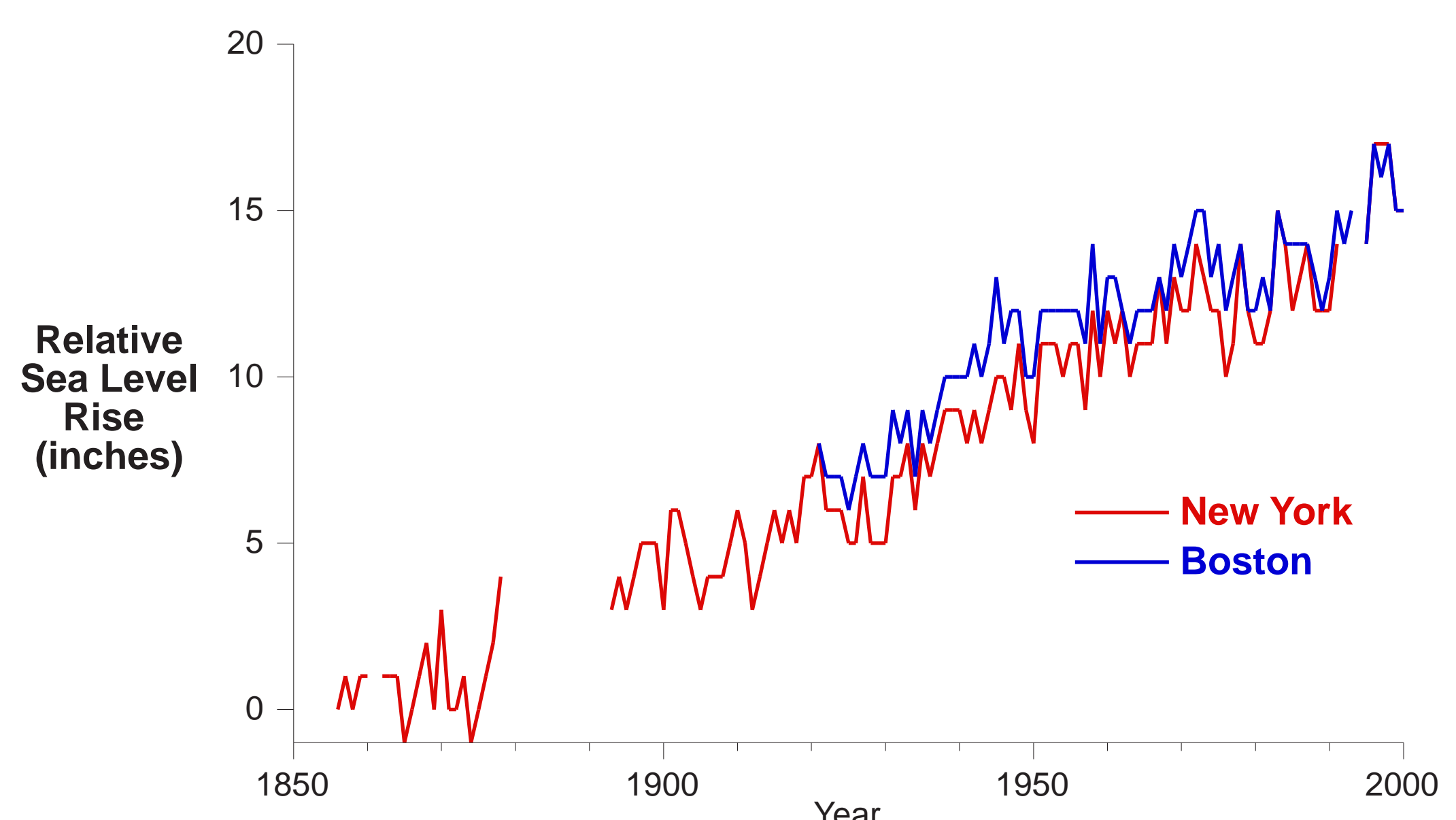
## Ocean Temperature & Sea Level Trends

Average Annual Sea Surface Temperature 1855-2001



Both the Gulf of Maine (off the coast of New Hampshire and Maine) and the South Shore (extending from Cape Cod, MA to Long Island, NY) show an increasing trend in sea surface temperatures. Data from NOAA Climate Diagnostics Center.

Change in Relative Sea Level 1855-2000



With the 1856 level set to zero, the above graph shows the relative rise in sea level for Boston, MA and New York City, NY over the last 150 years. As relative sea level continues to rise, development along the coast will be subjected to flooding (especially at high tide storm surge), erosion, and salt water contamination.