Changes in Precipitation: Climatograms of Pittsburgh, Pennsylvania from 1886 – 2018

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The information collected here was obtained from The National Oceanic and Atmospheric Administration (NOAA) and the National Weather Service (https://www.weather.gov/pbz/pit_records).

The climatographs were created using a template obtained from NASA's Precipitation Education Online Center: https://pmm.nasa.gov/education/lesson-plans/geographical-influences

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Purpose:

This book serves to provide a visual tool for observing changes in temperature and precipitation data overtime (climate). This is accomplished by taking the median temperature (°F) and precipitation (inches) for Pittsburgh, Pennsylvania from 1886 – 2018 and graphing it on the same graph, called a climatogram graph. All data was collected from NOAA (www.weather.gov). This allows the user to access any given year and visualize the relationship between temperature and precipitation. An additional precipitation box is present on each graph, which provides the average precipitation, the predicted precipitation, and the actual precipitation for that year. The average precipitation across the 132 years was determined to be 36.87 inches and remains constant for each box. The predicted precipitation was calculated based off the previous 5 years of precipitation values using a moving average; note that this value changes every year. The actual precipitation for the year is recorded in green, red, or black signifying that the precipitation was higher, lower, or the same as the predicted, respectively. The end of the booklet provides graphs of the precipitation and temperature over the 132 years, as well as a graph with the precipitation and temperature coupled with the moving averages, i.e. predicted values (found on pages 72-73).

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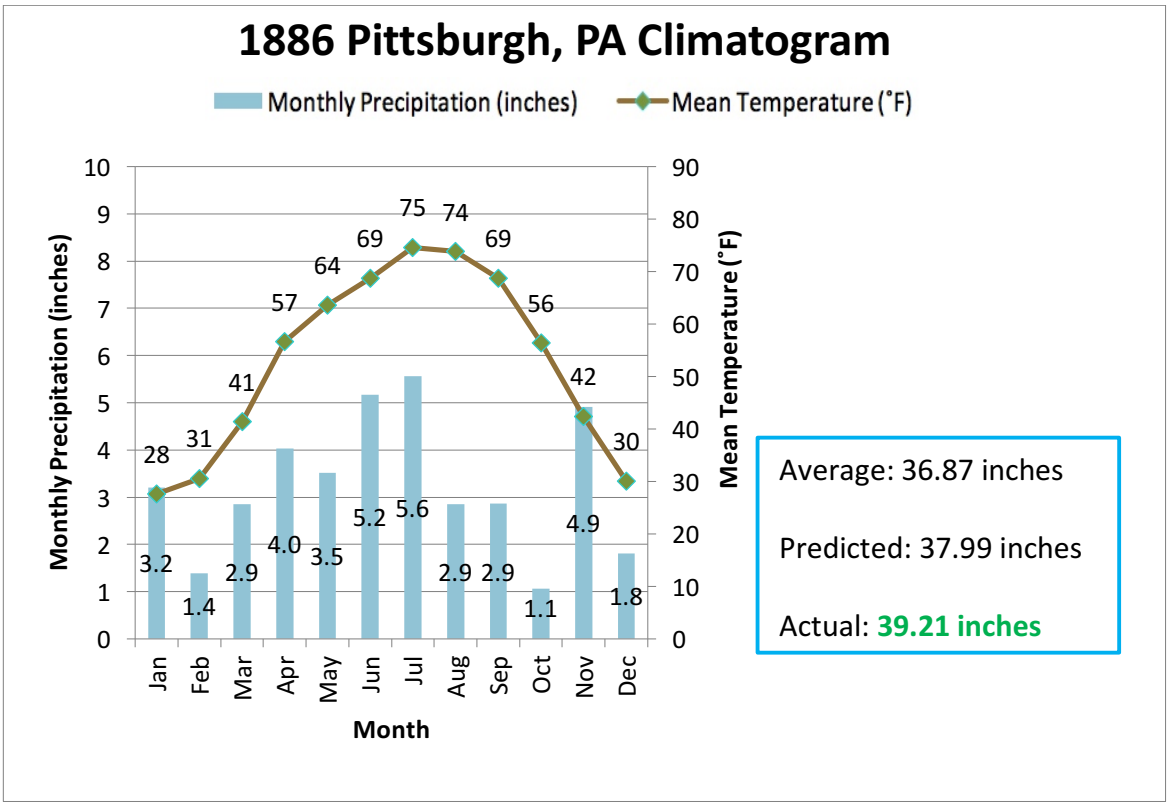

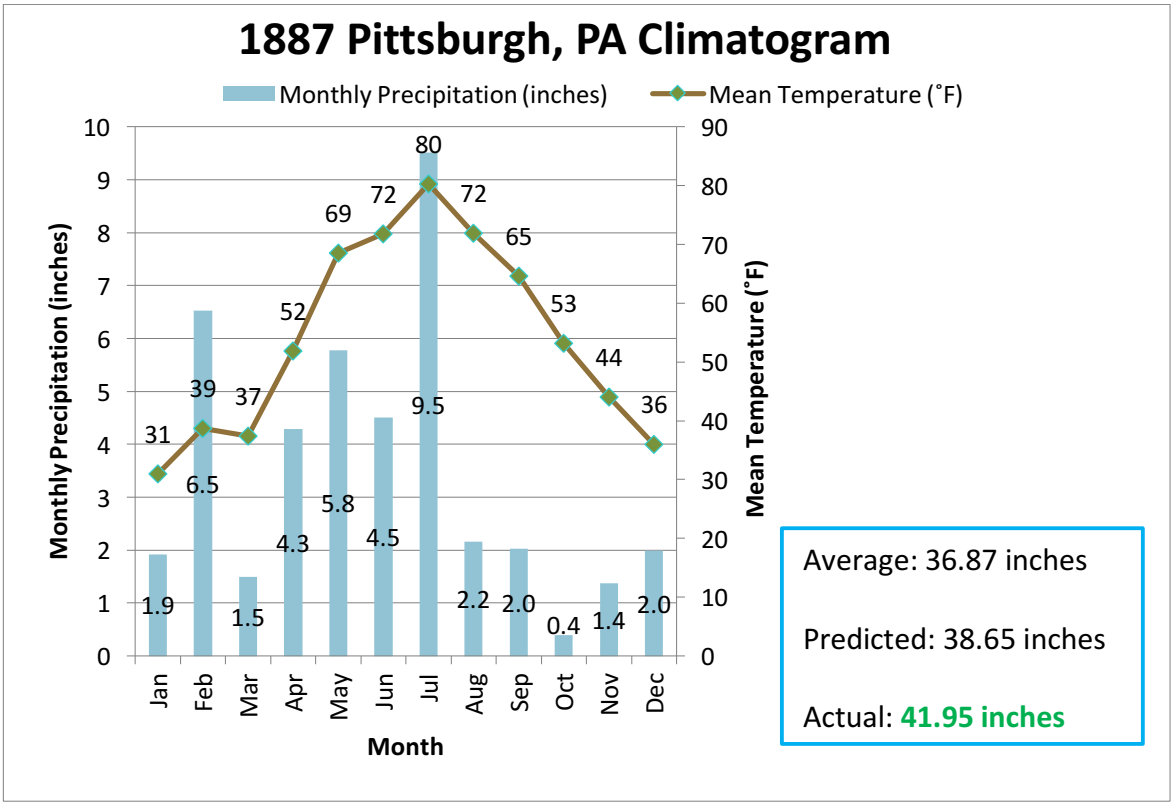

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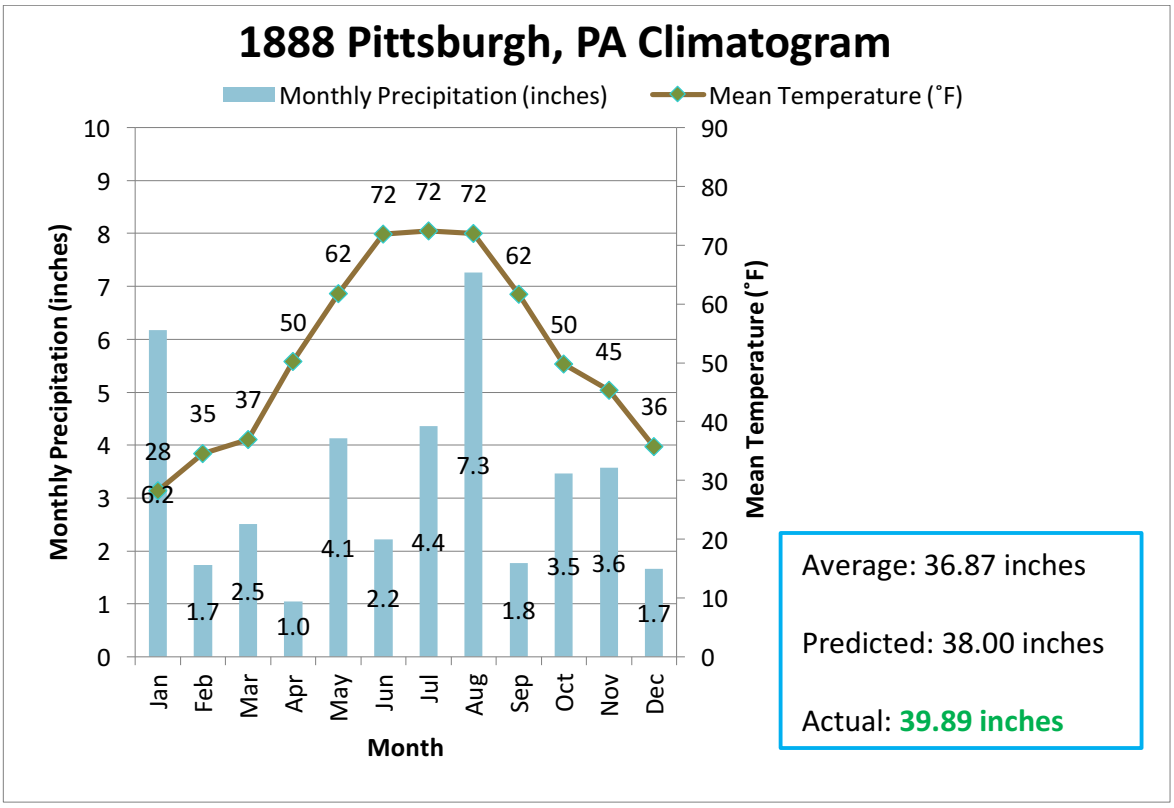

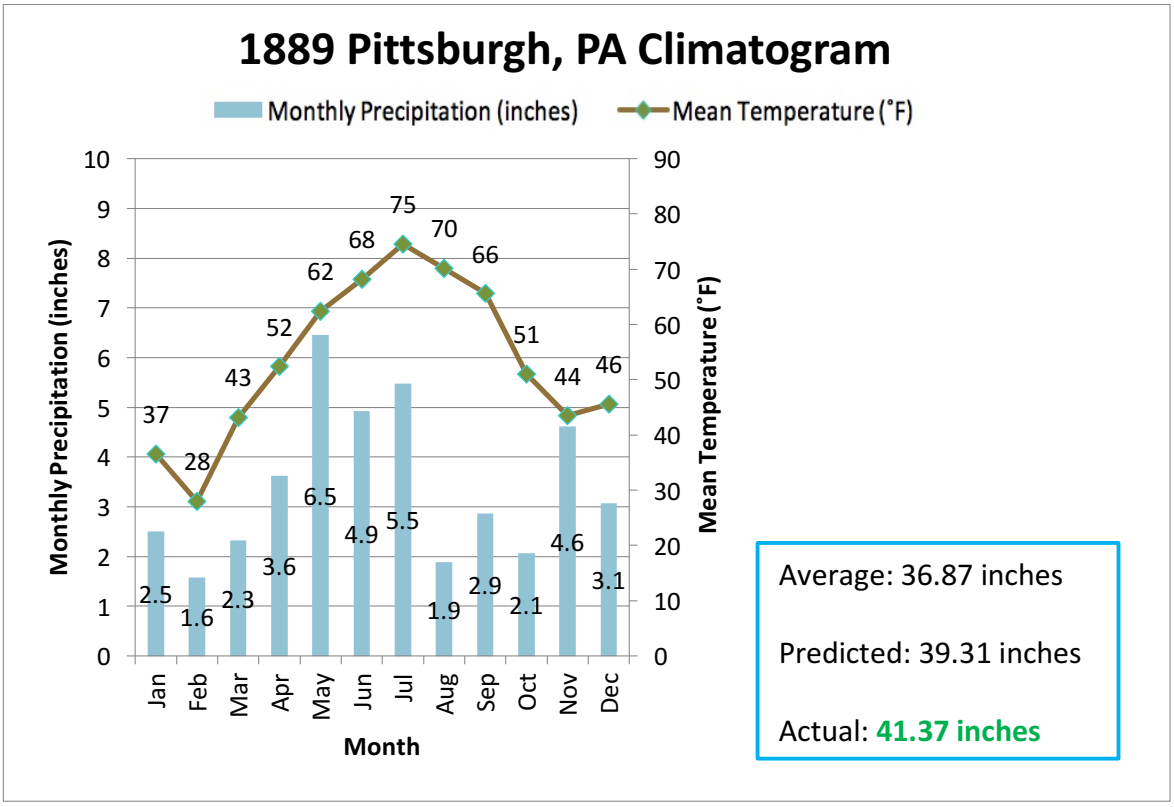

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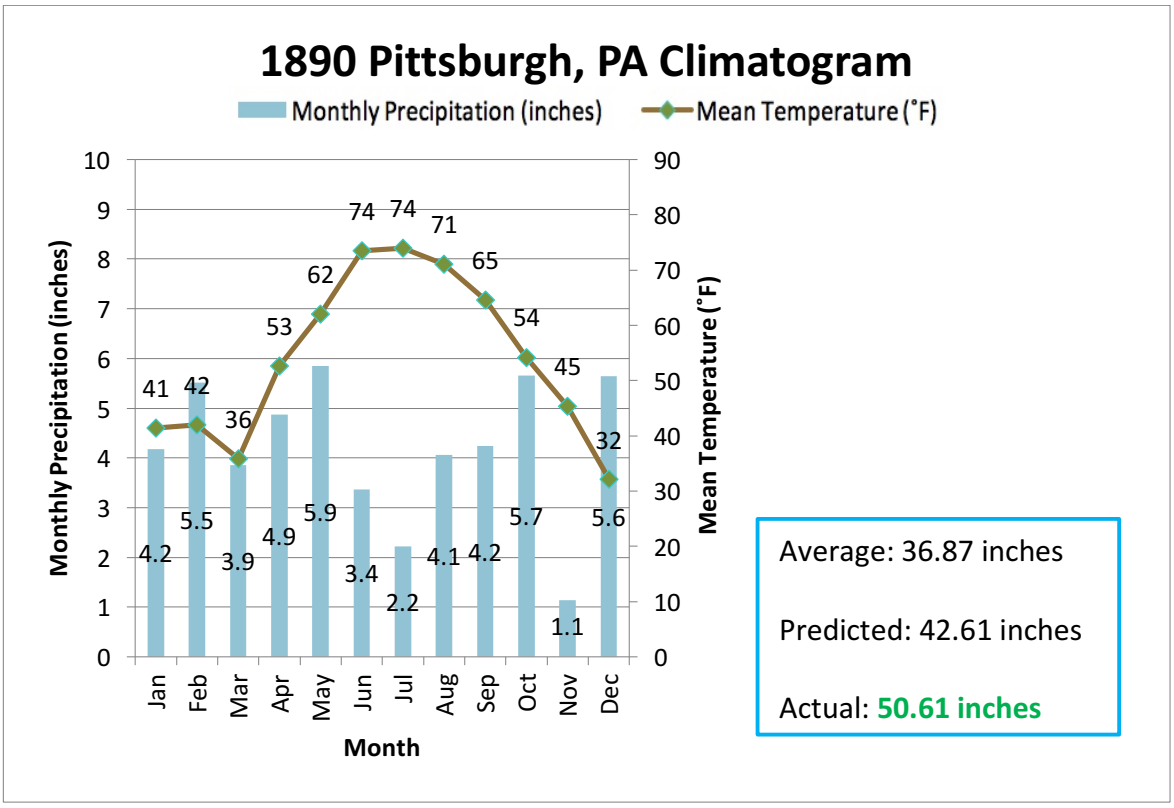

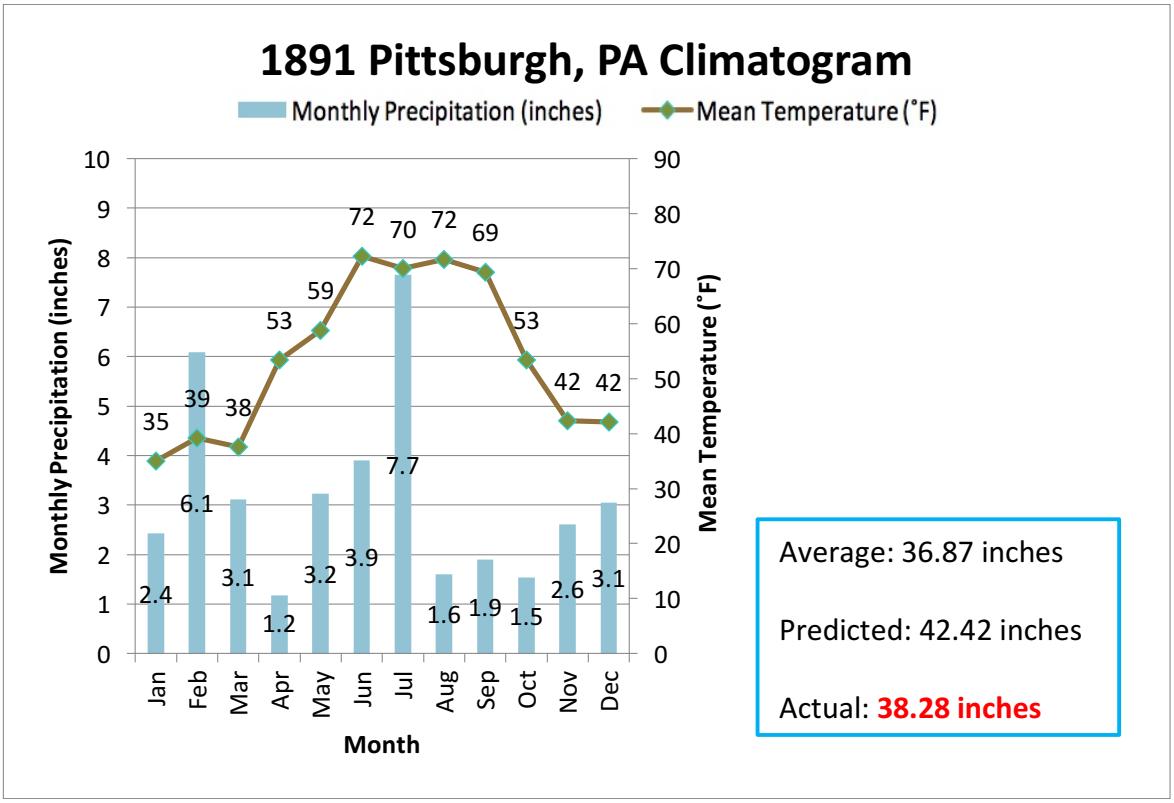

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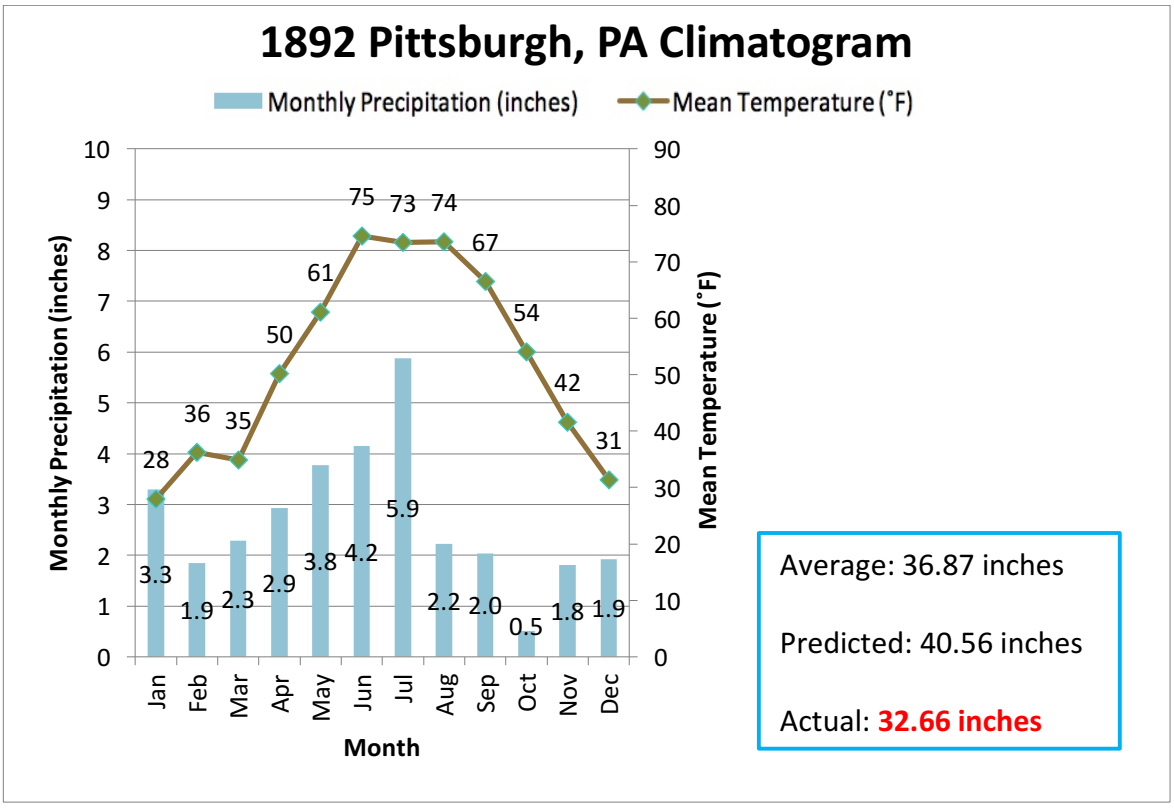

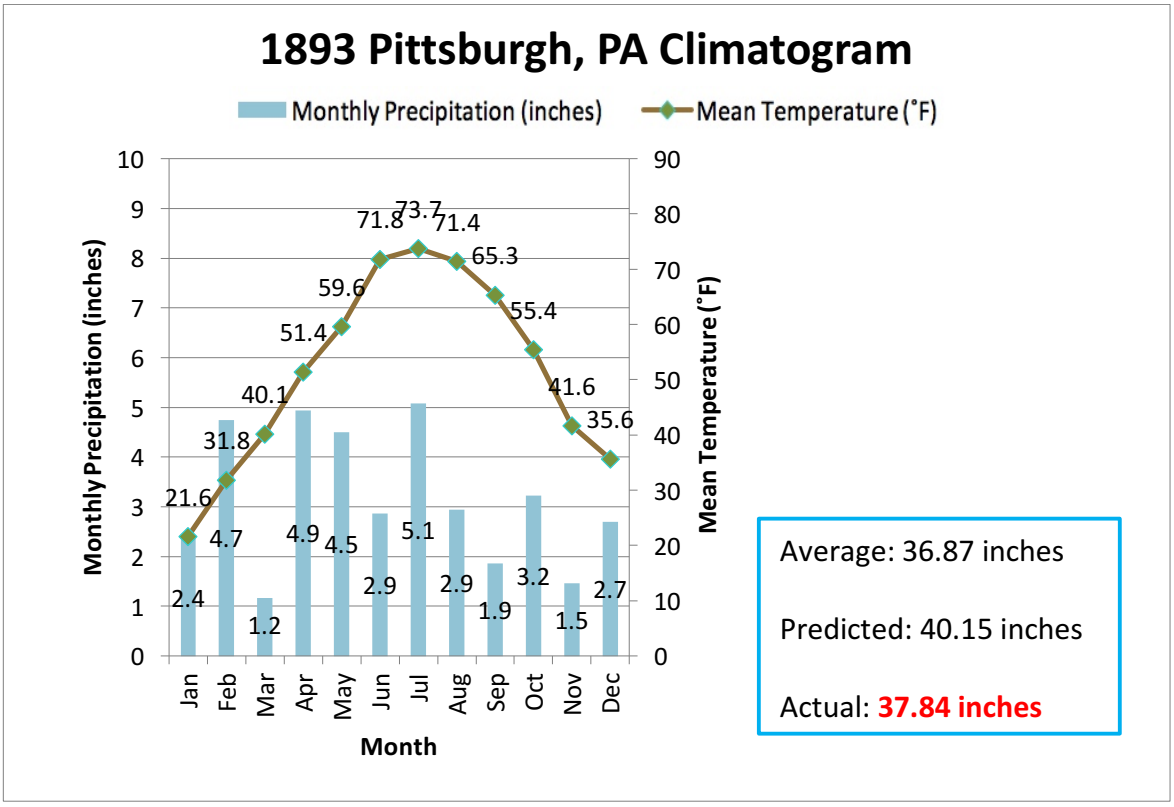

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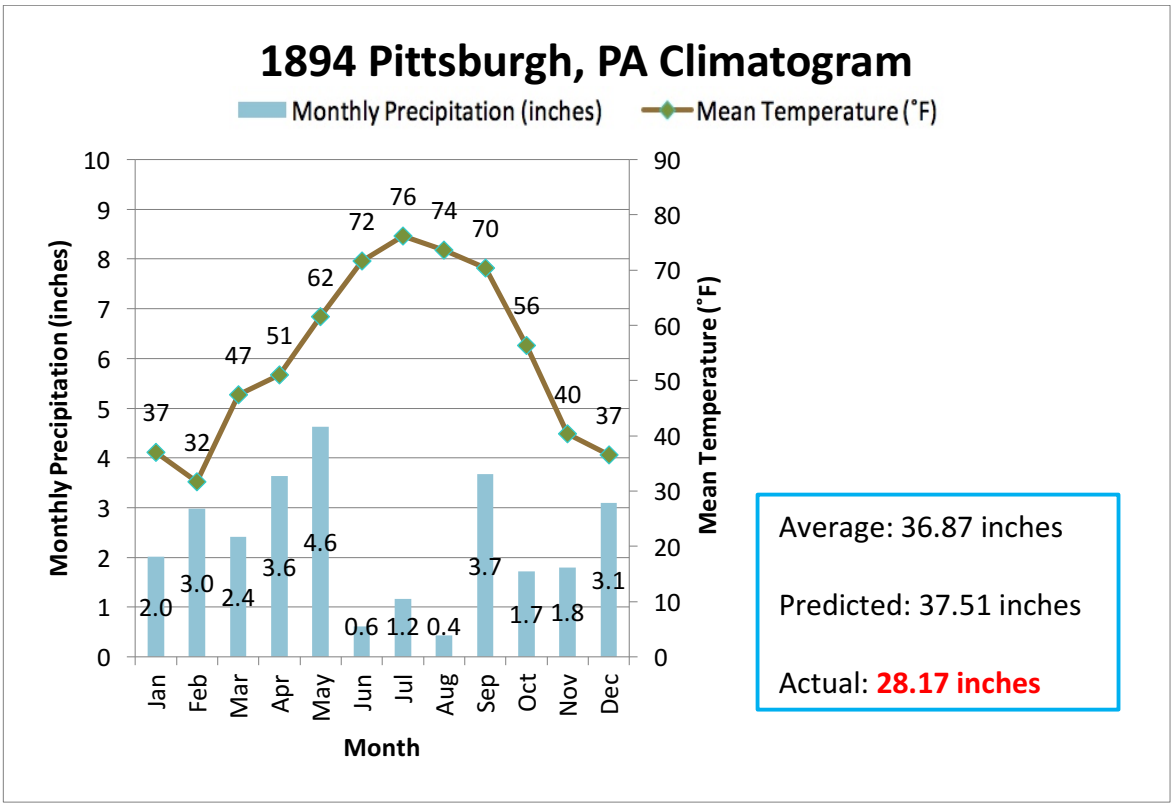

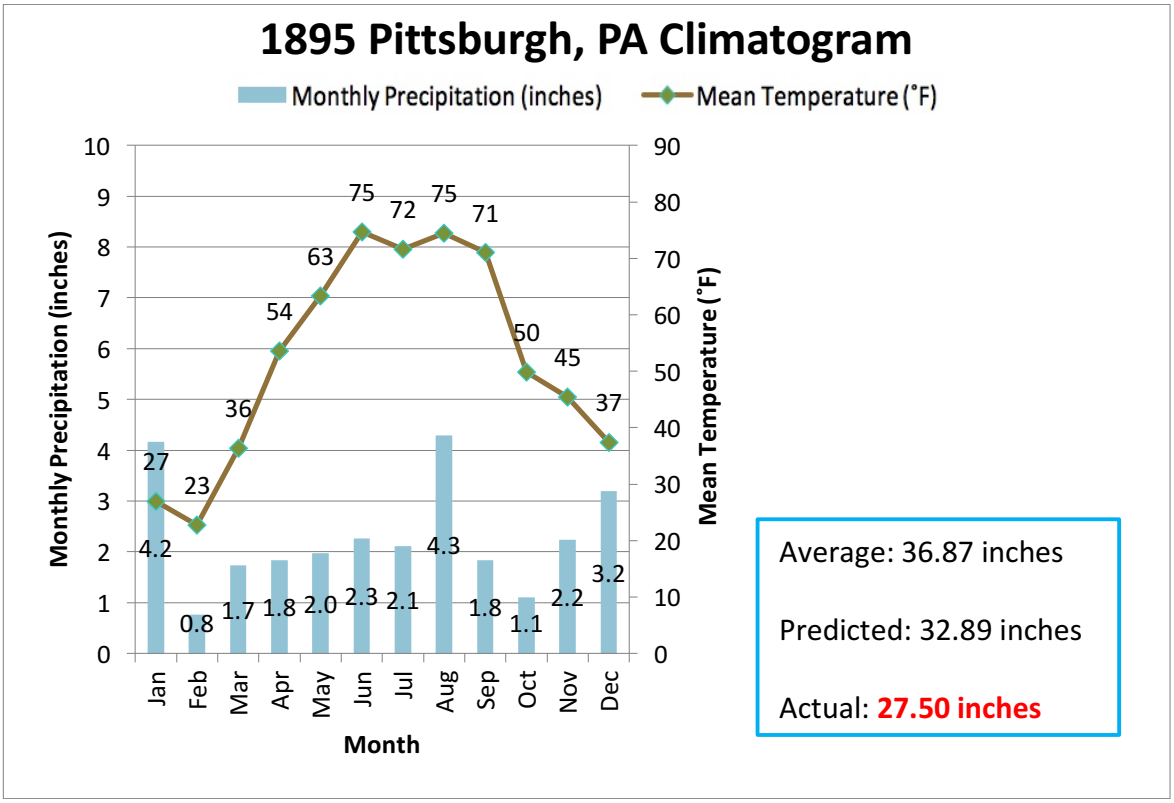

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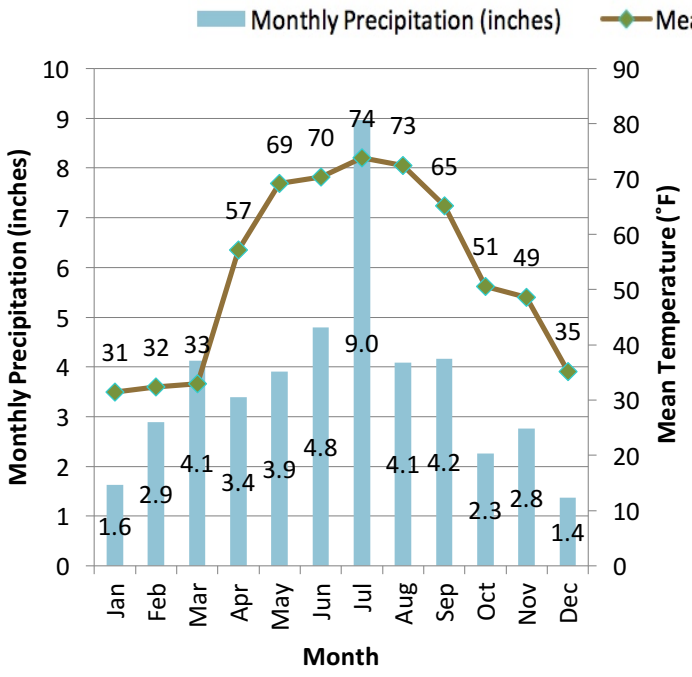
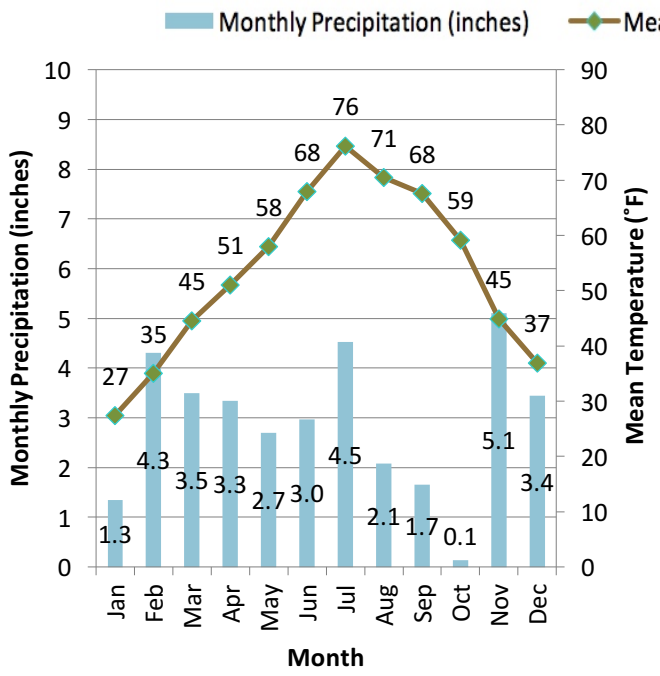


Average: 36.87 inches

Predicted: 34.10 inches

Actual: **44.25 inches**



Average: 36.87 inches

Predicted: 34.59 inches

Actual: 35.08 inches

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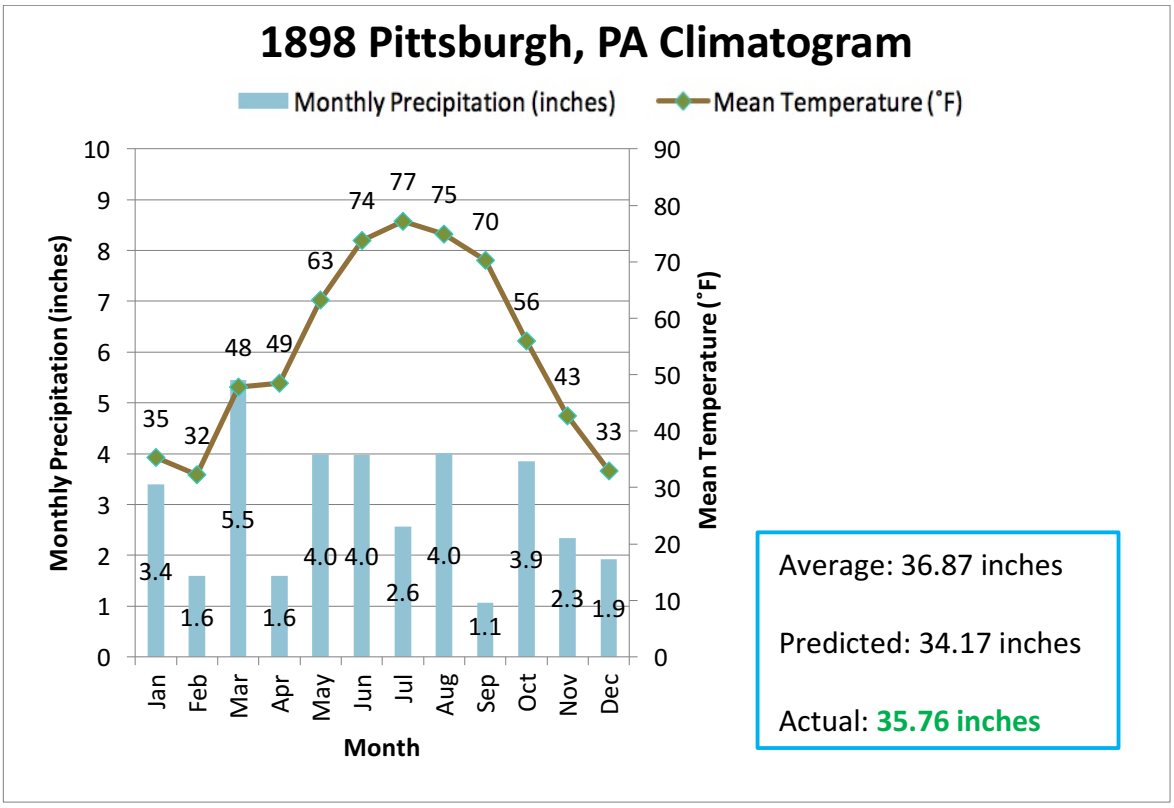

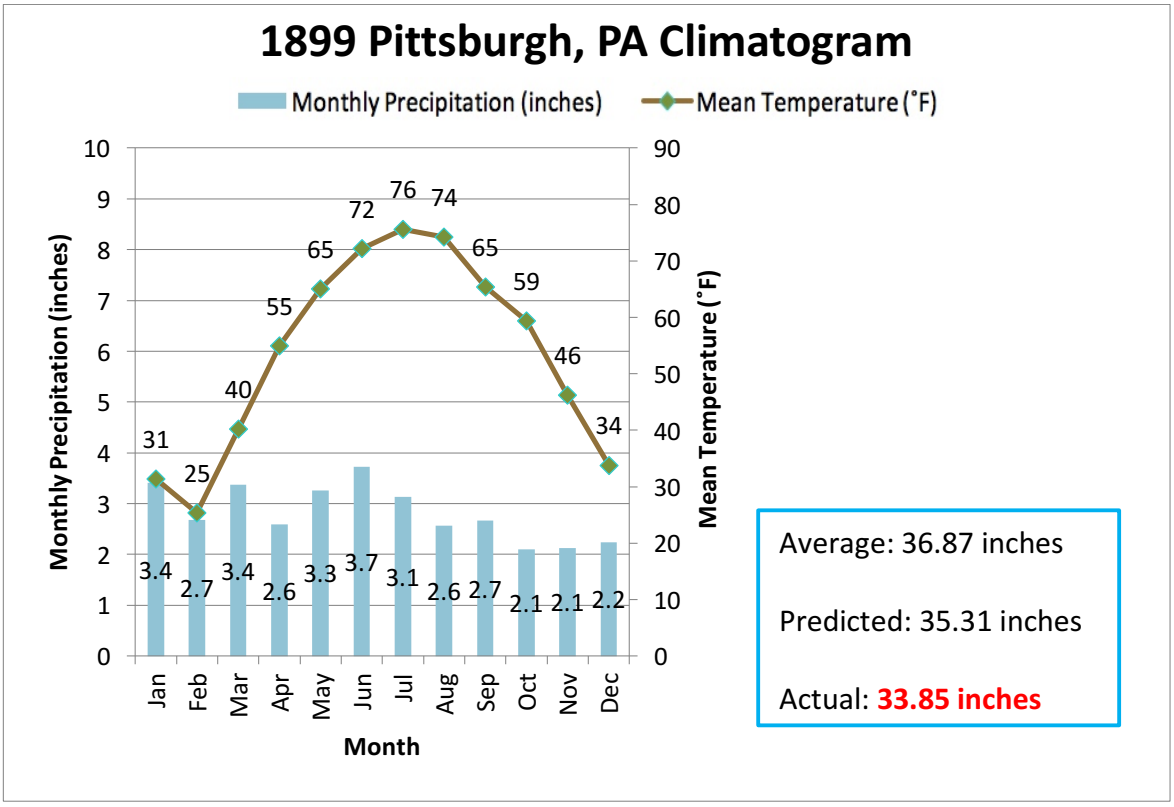

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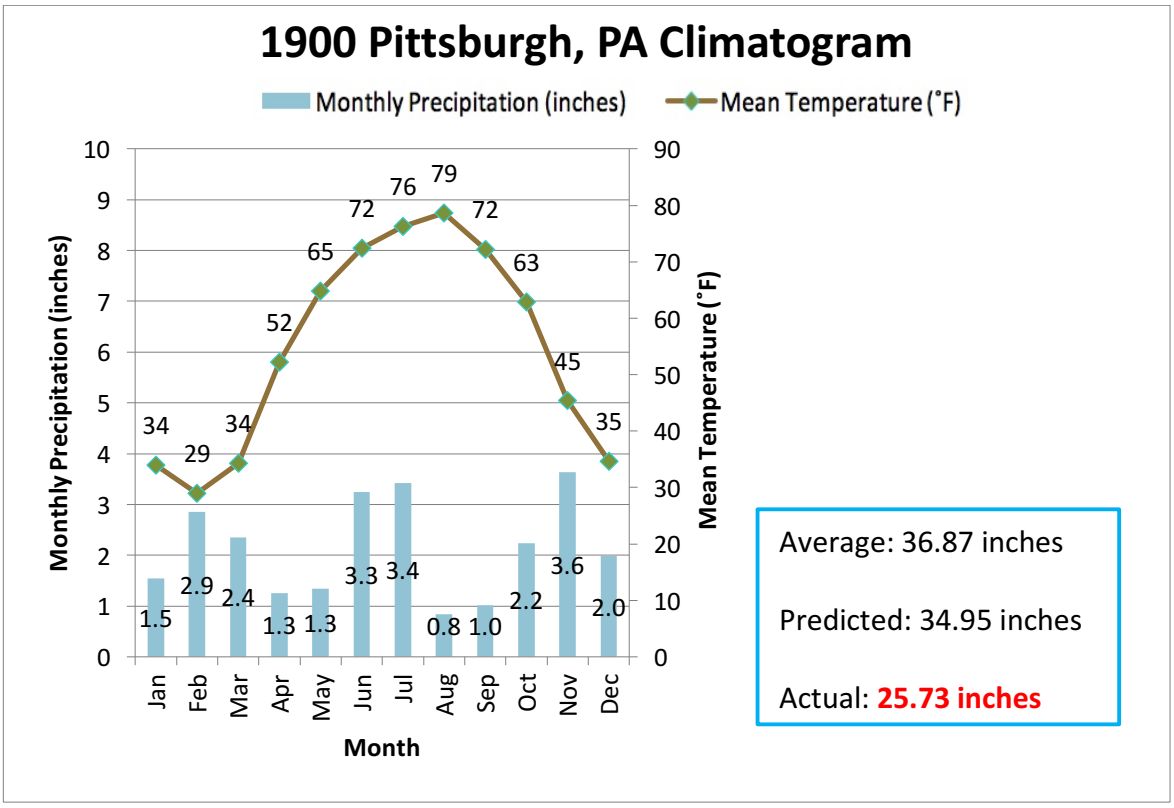

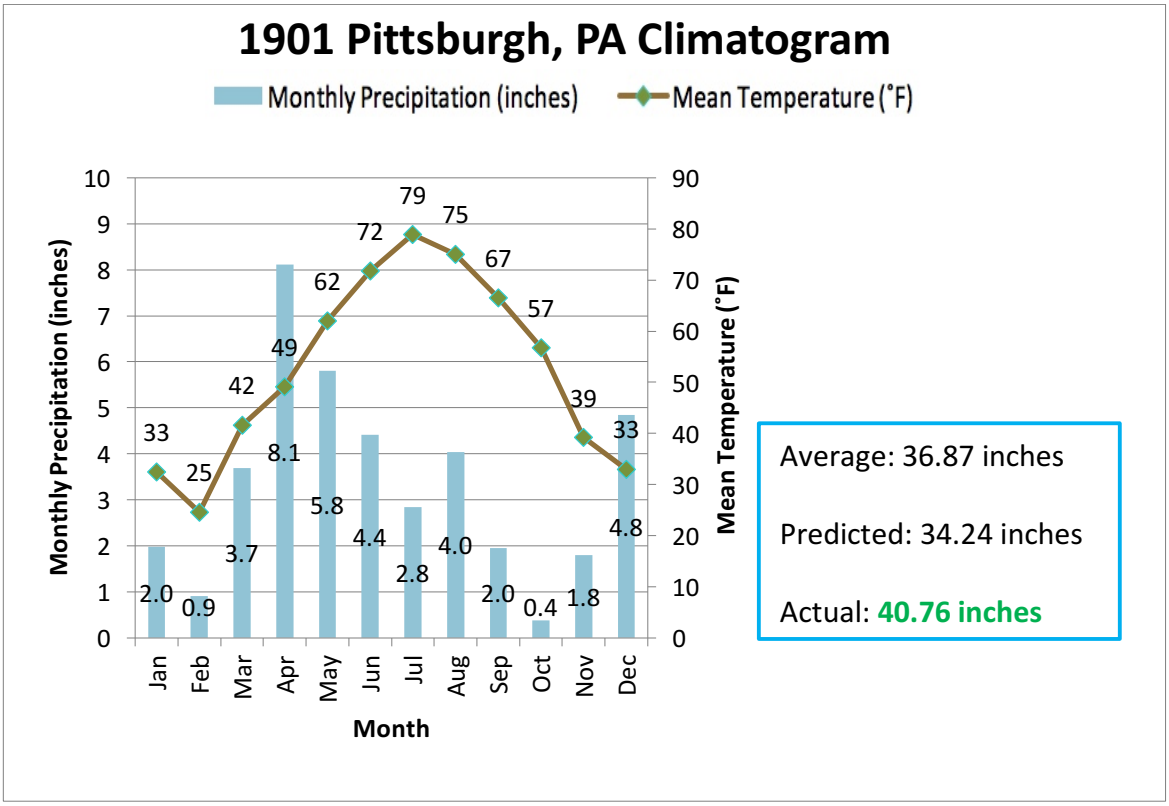

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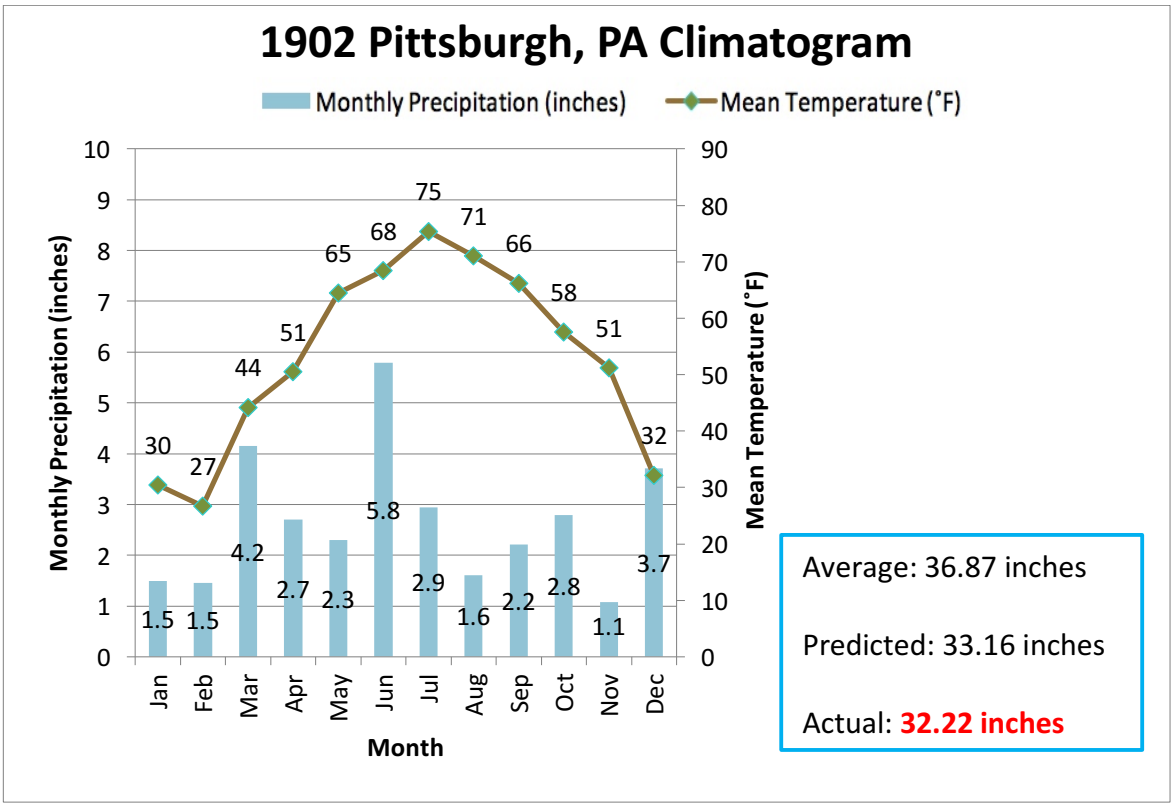

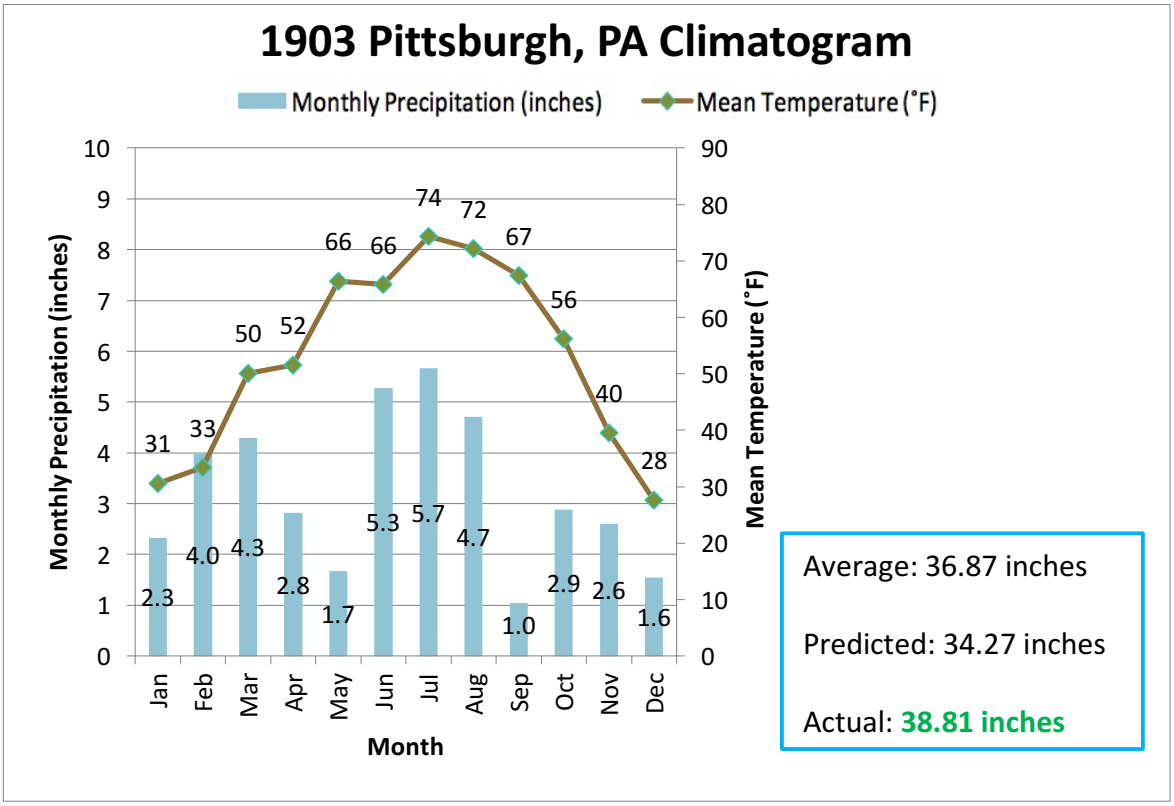

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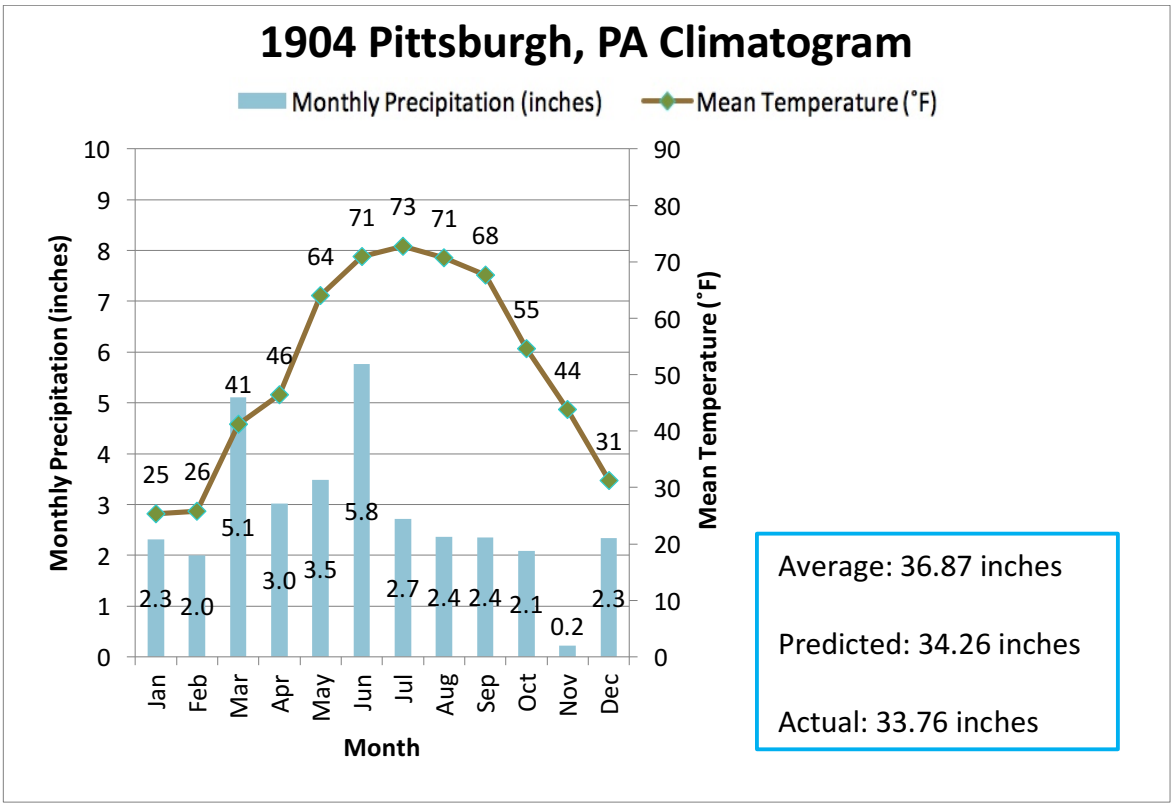

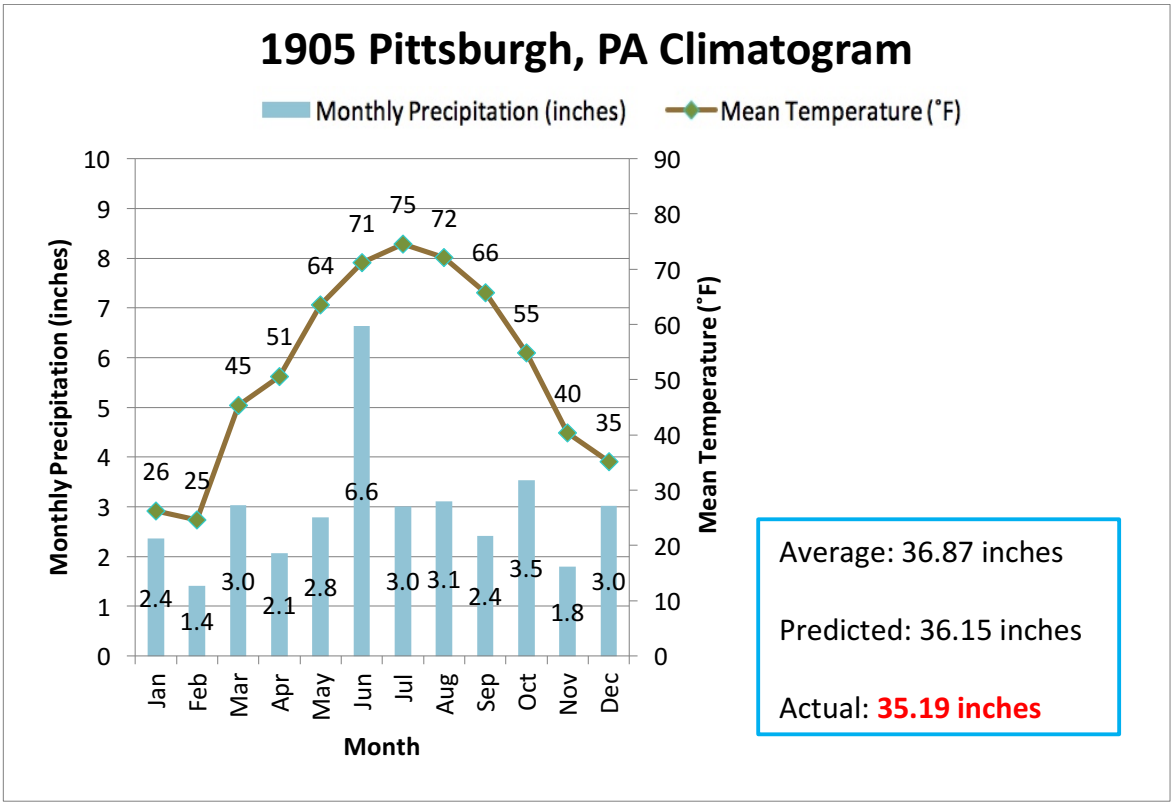

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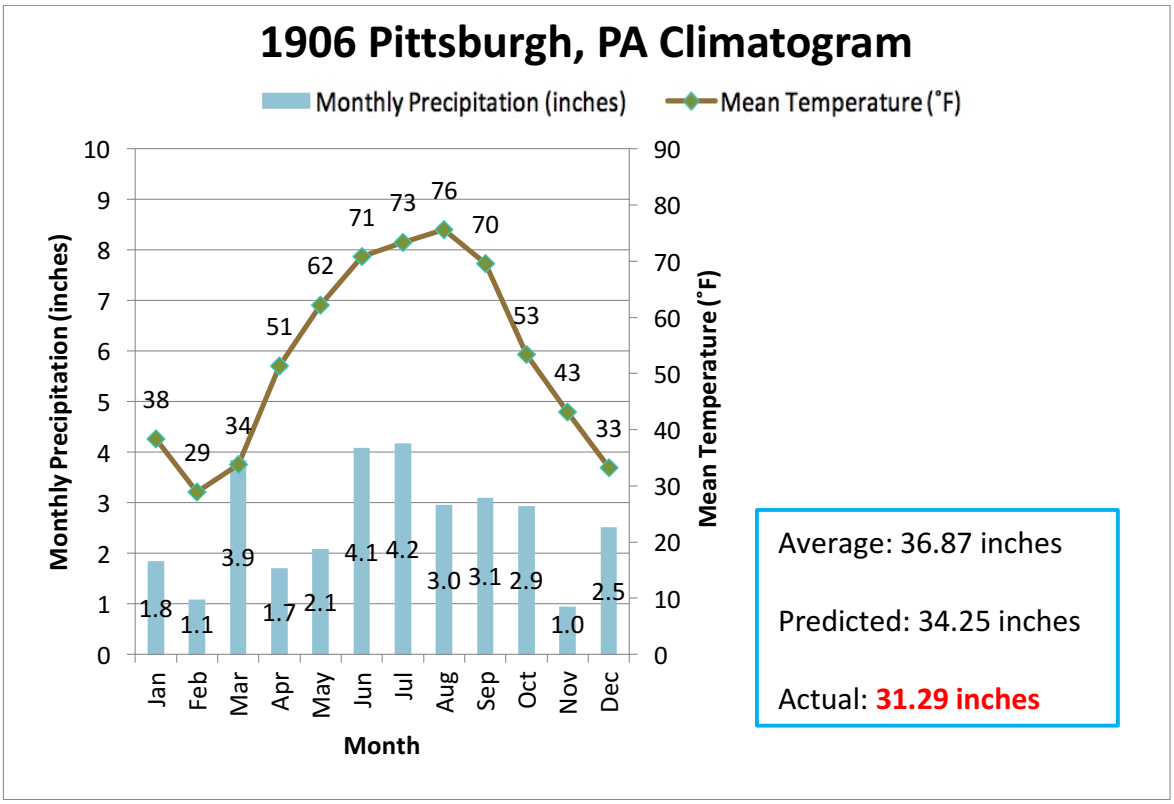

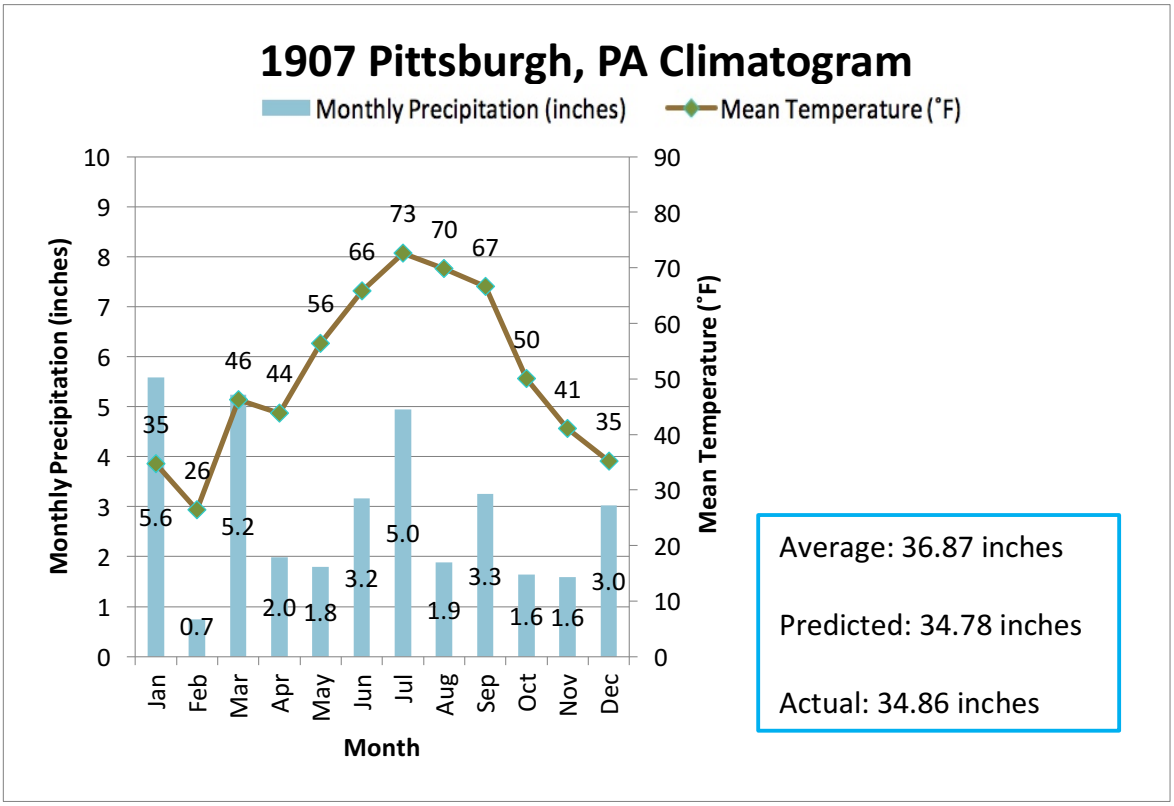

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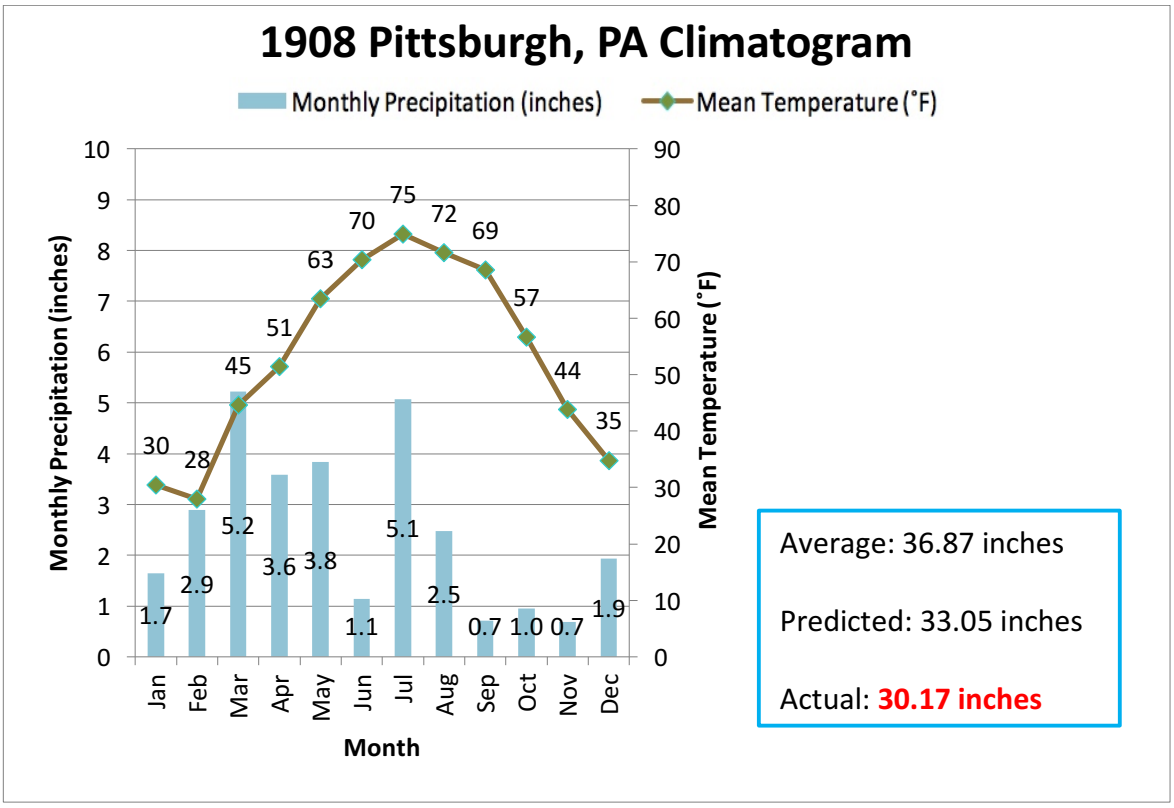

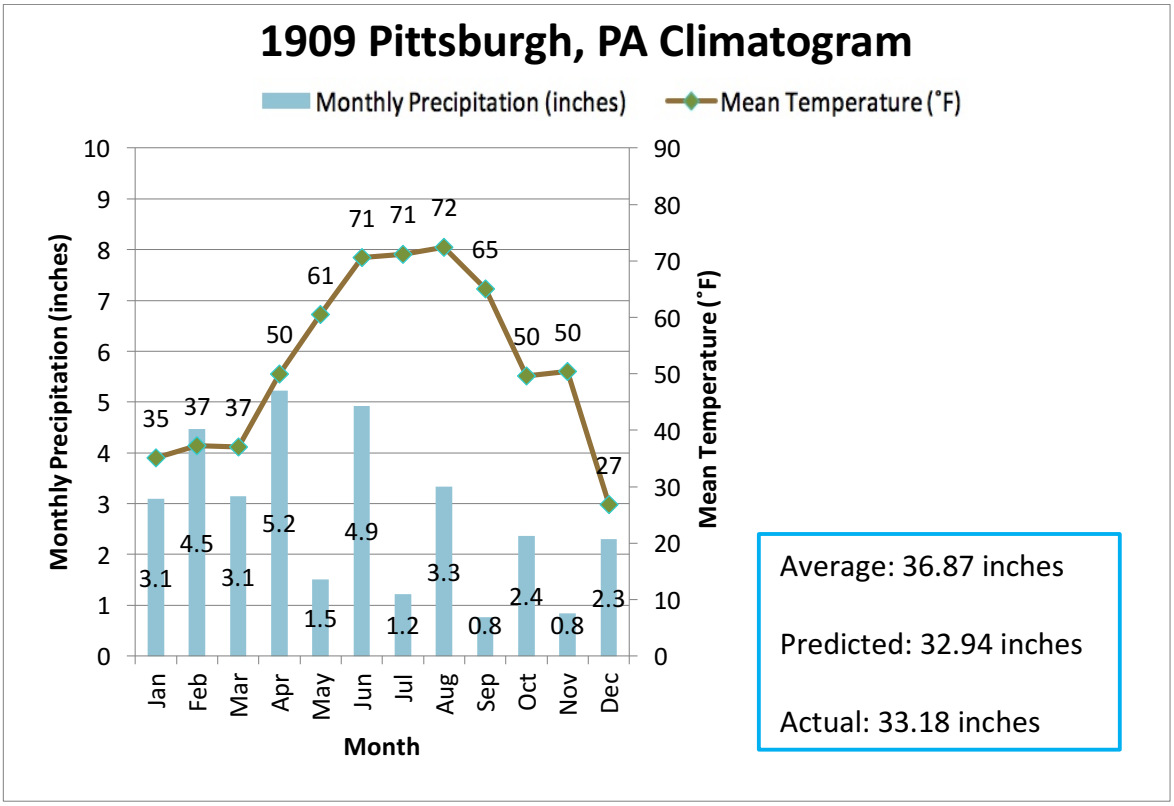

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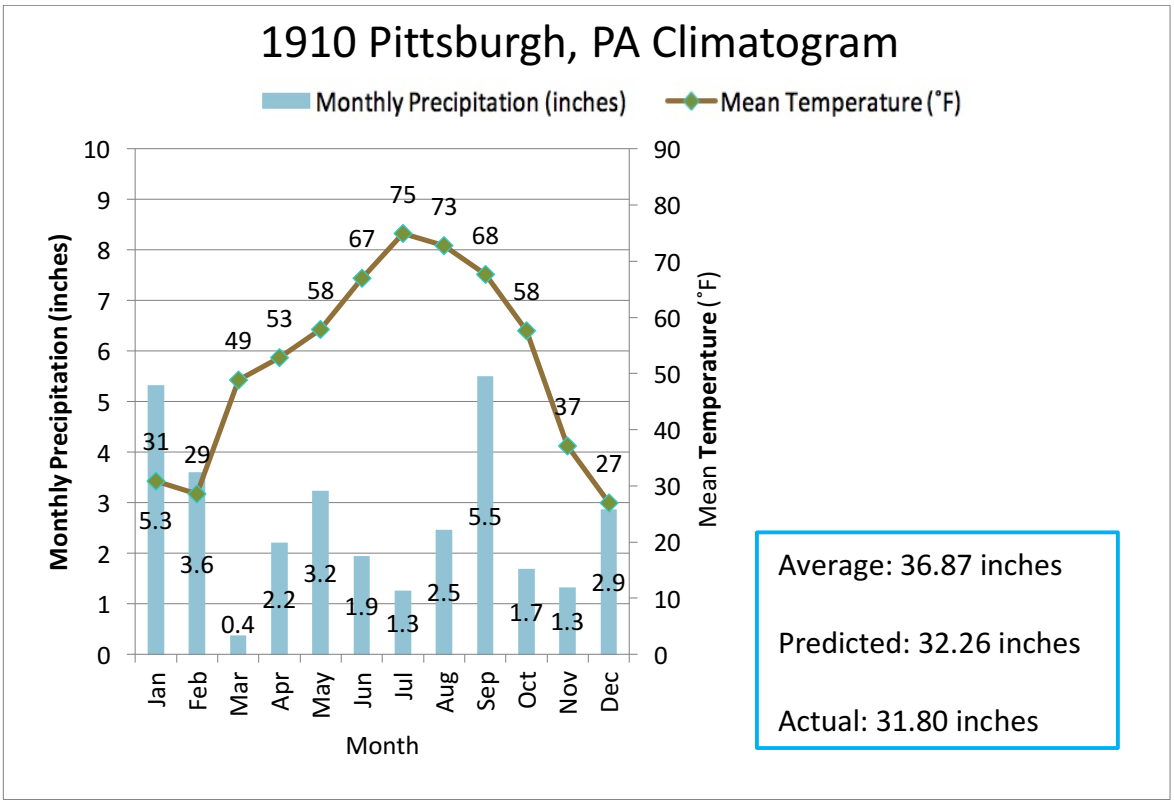

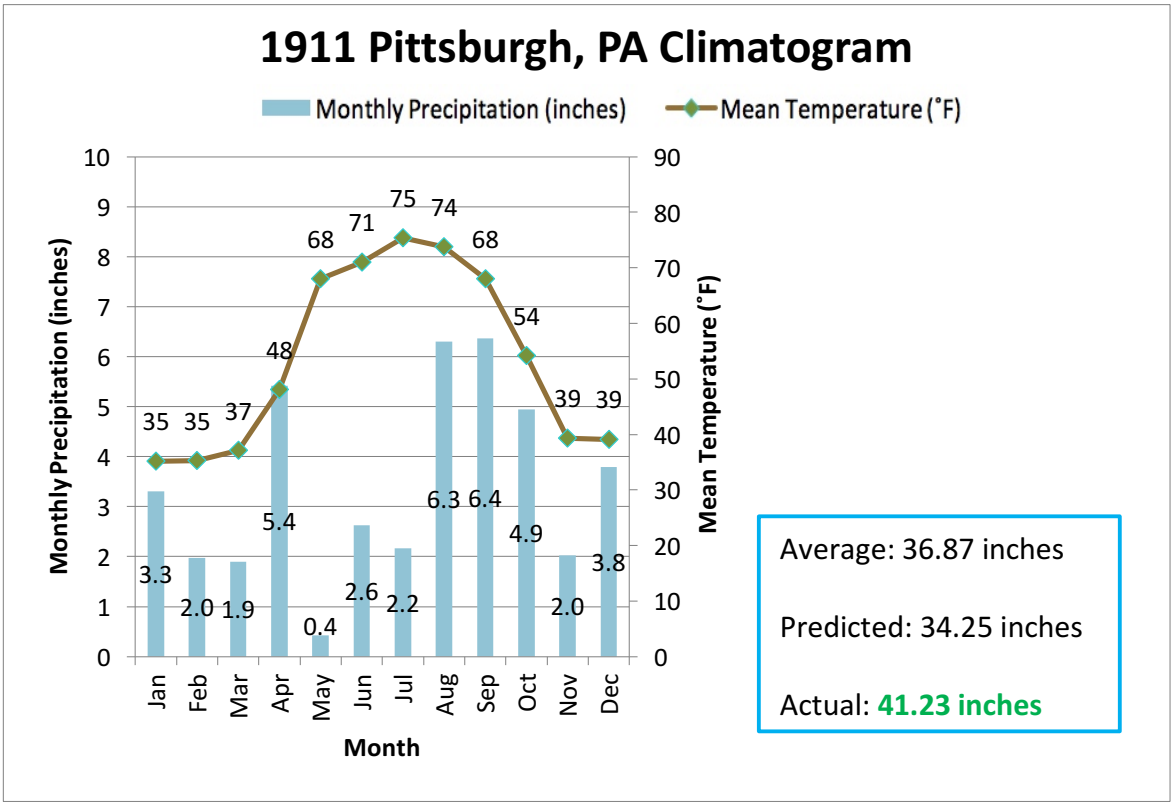

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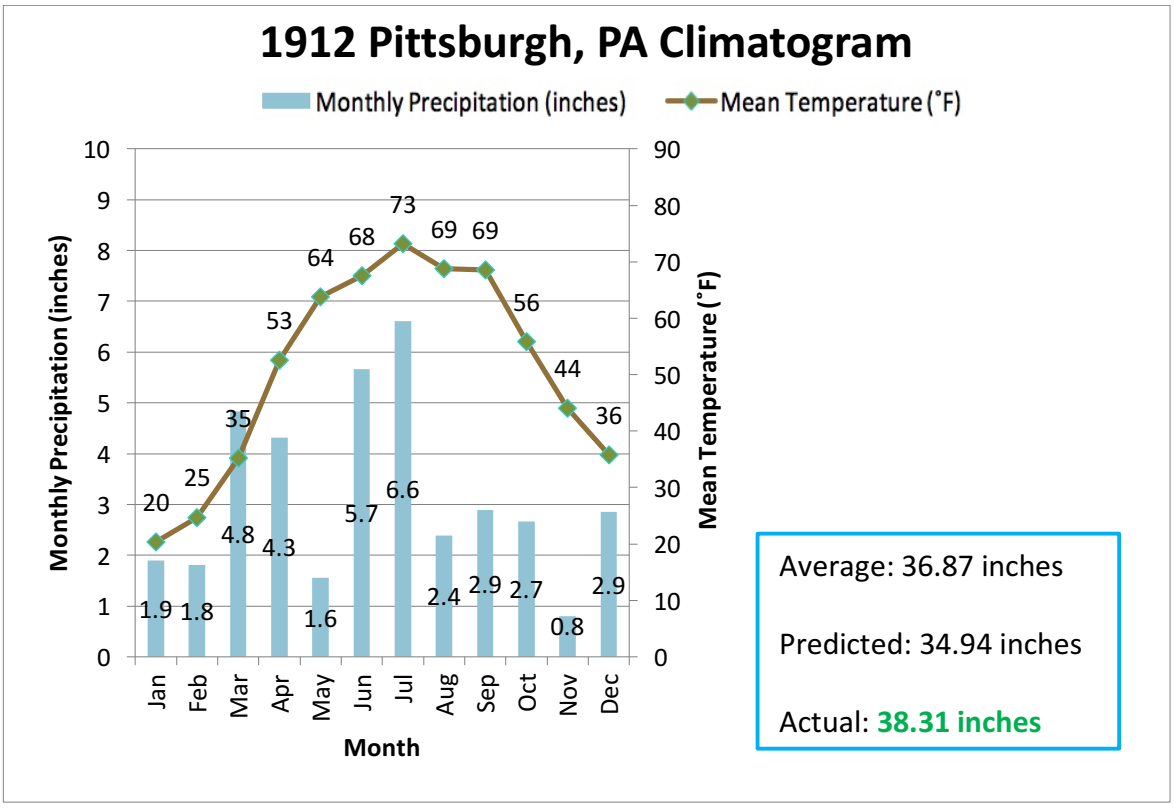

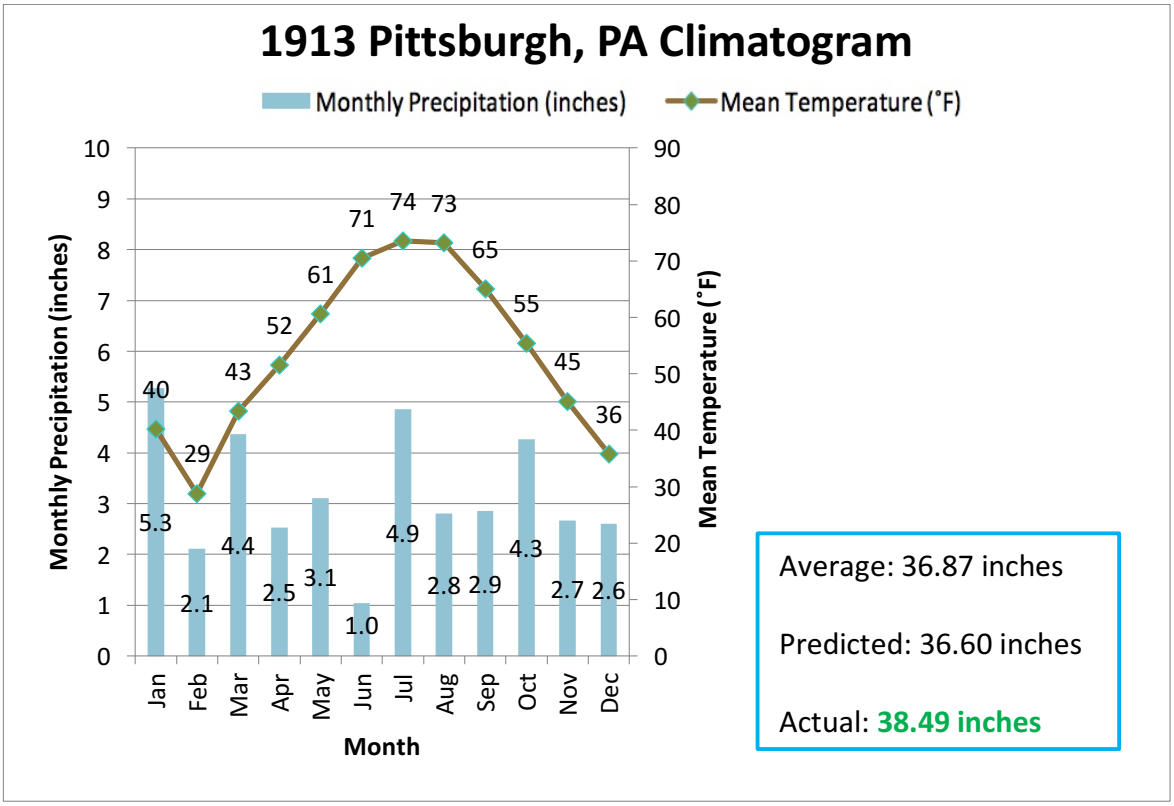

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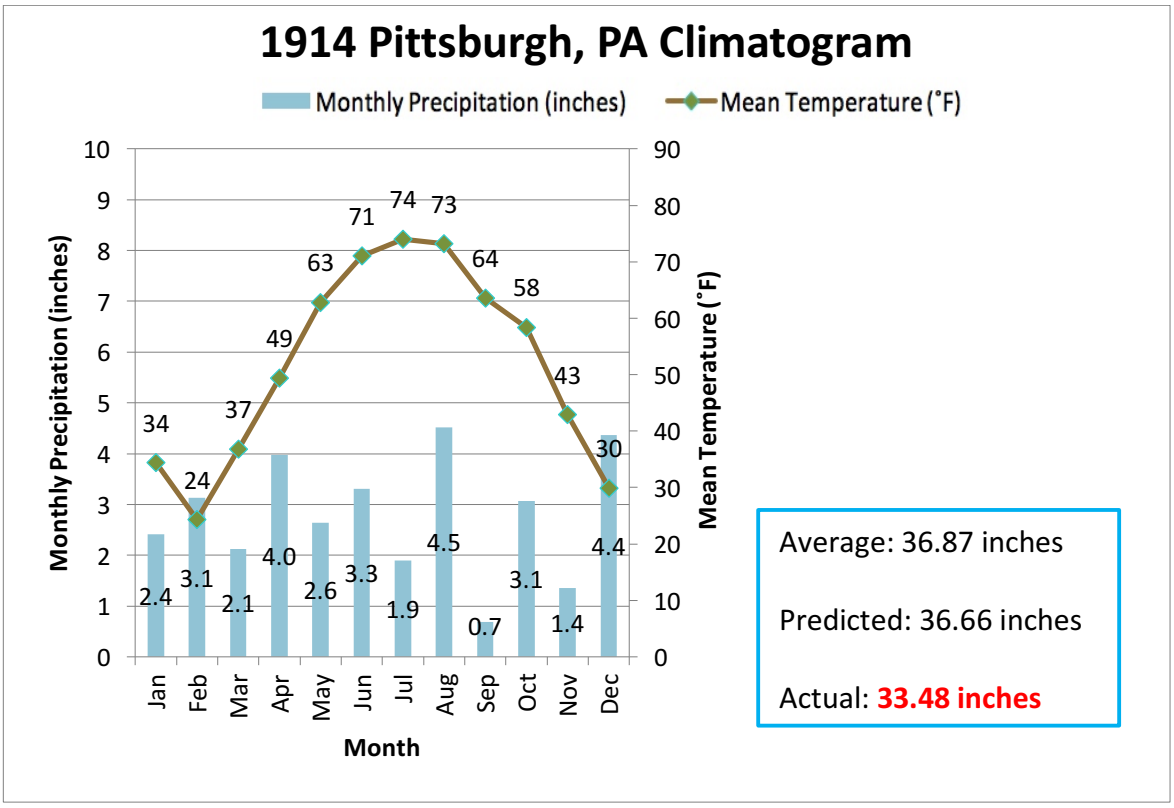

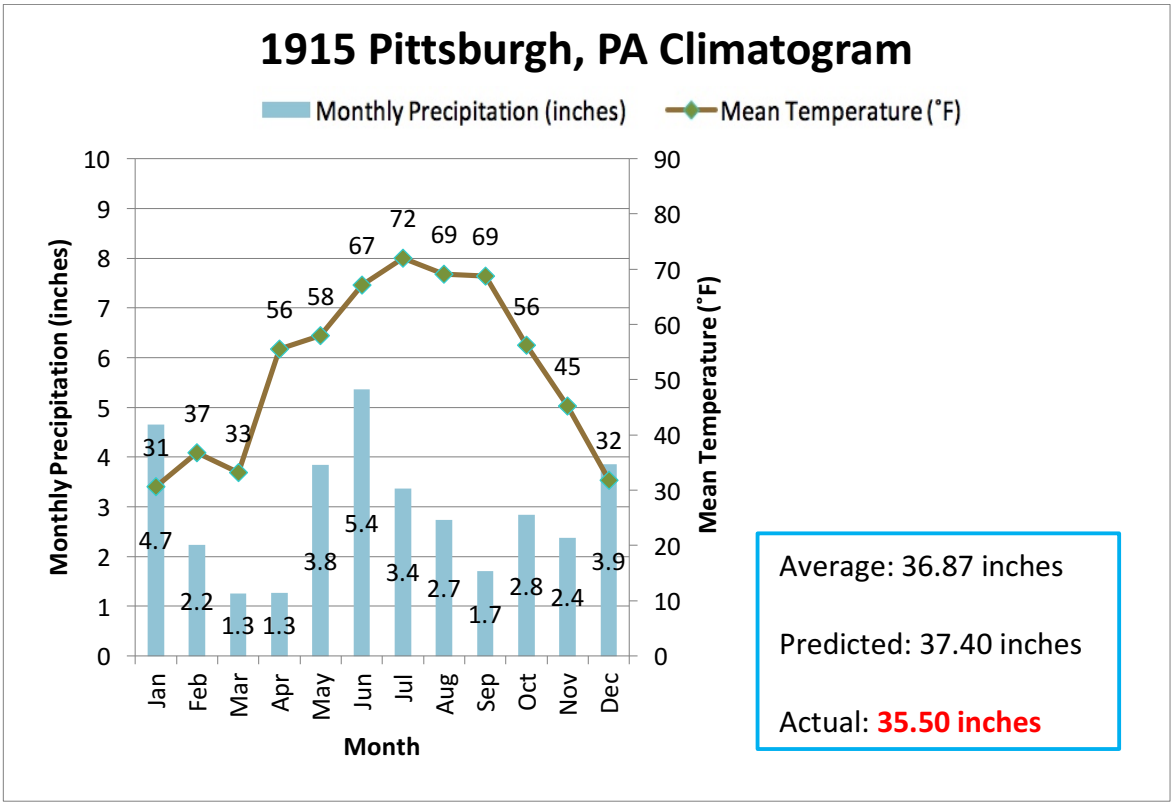

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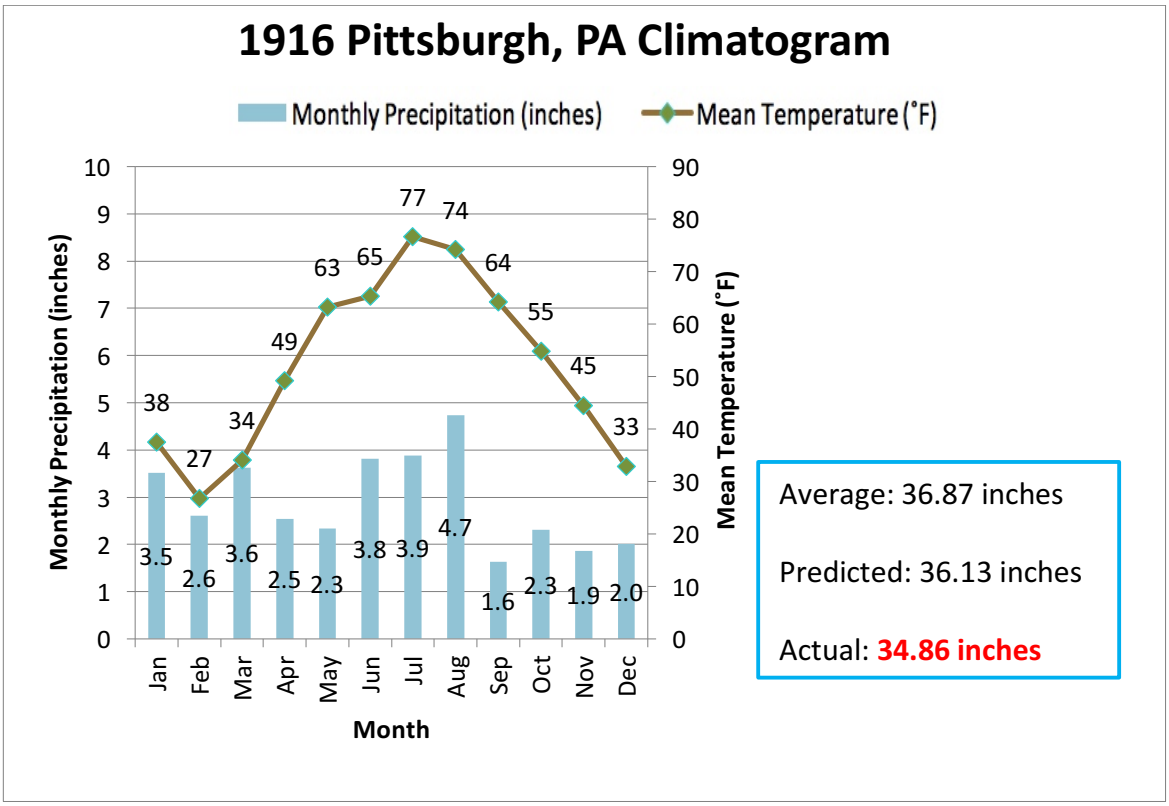

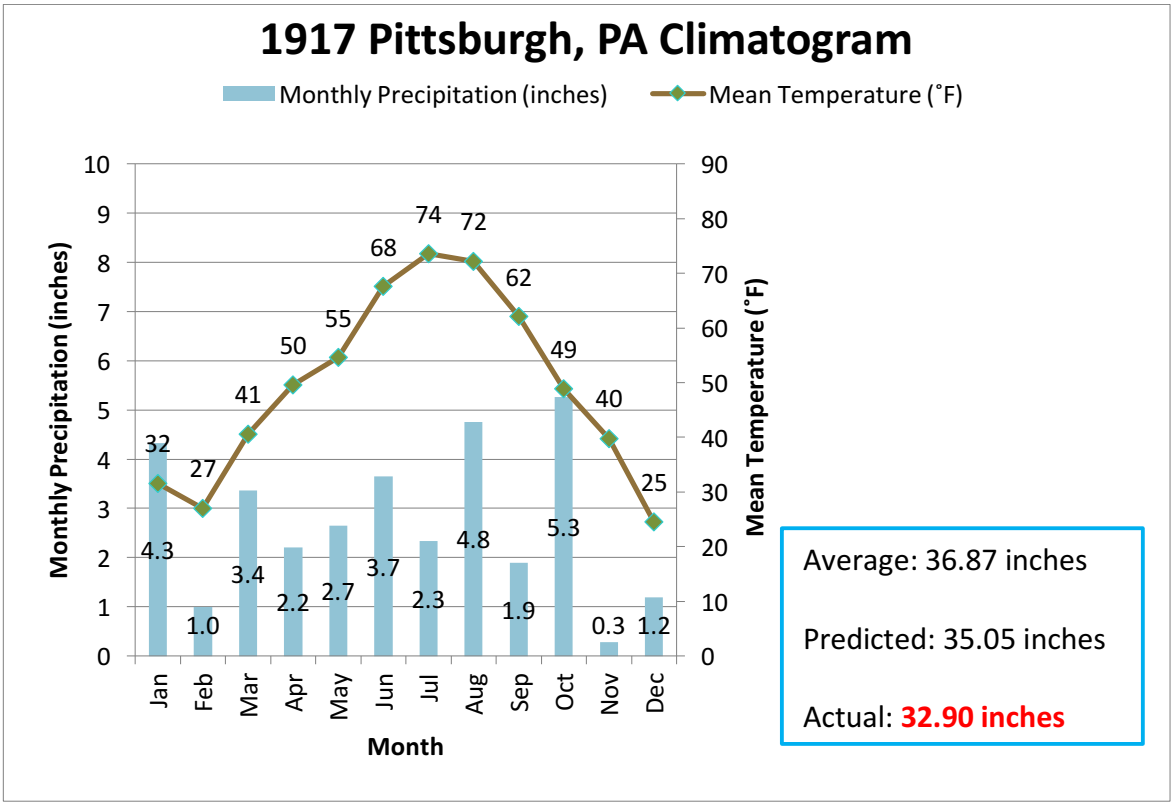

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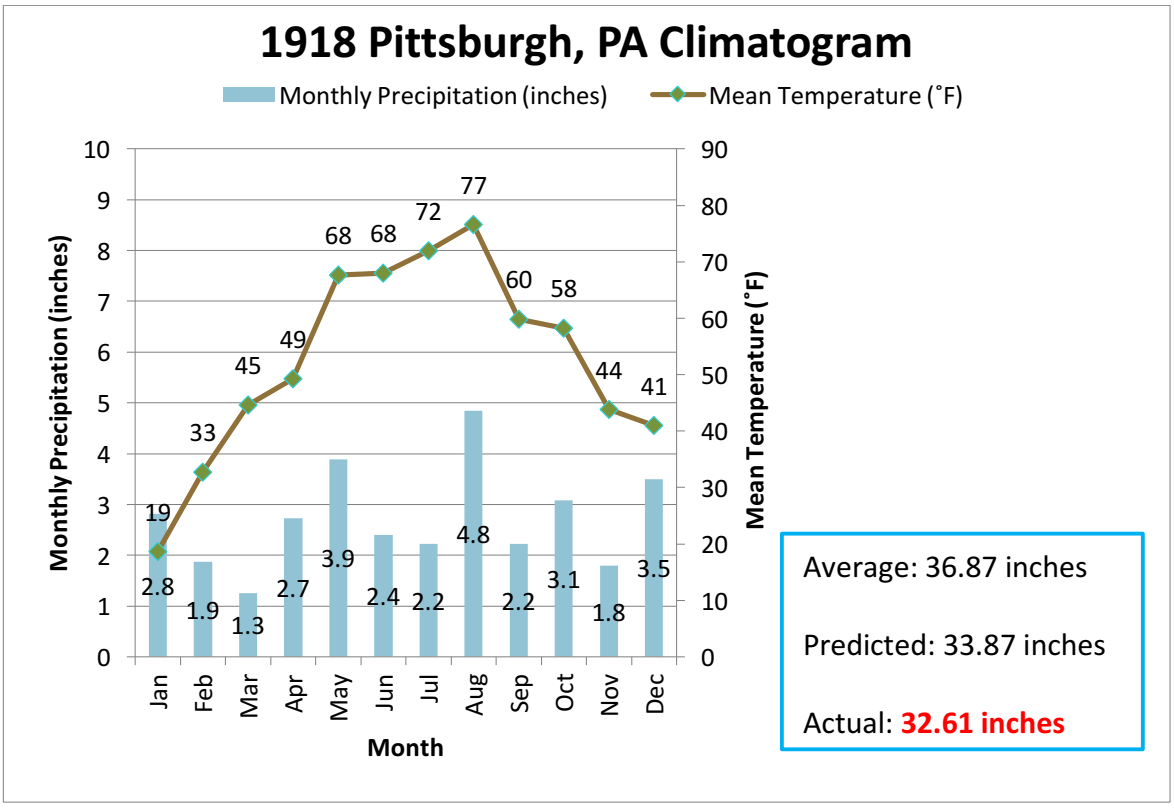

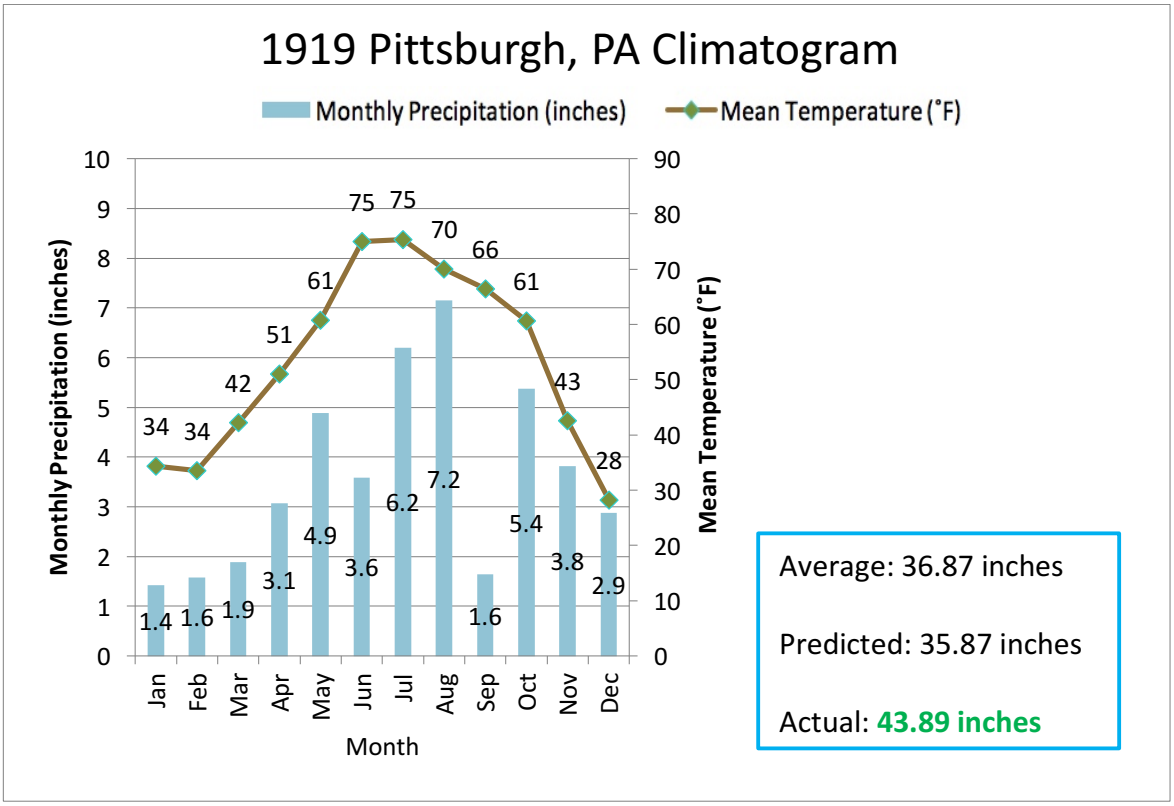

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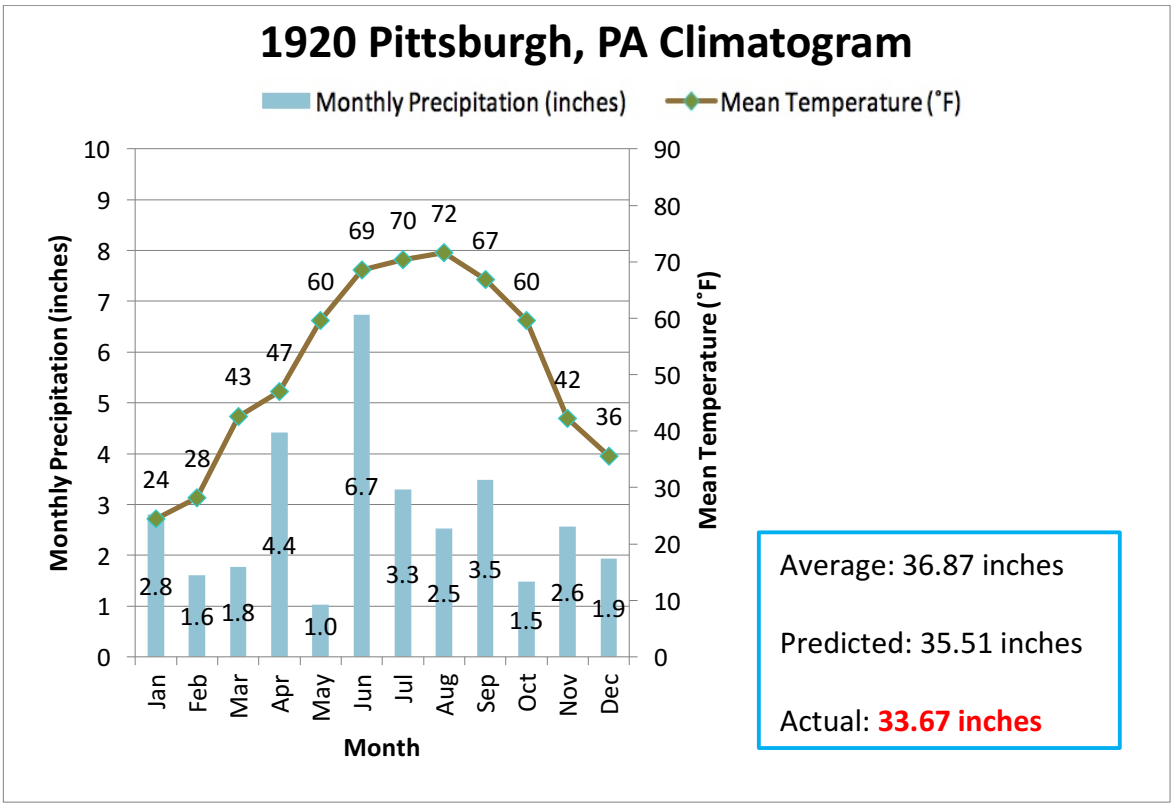

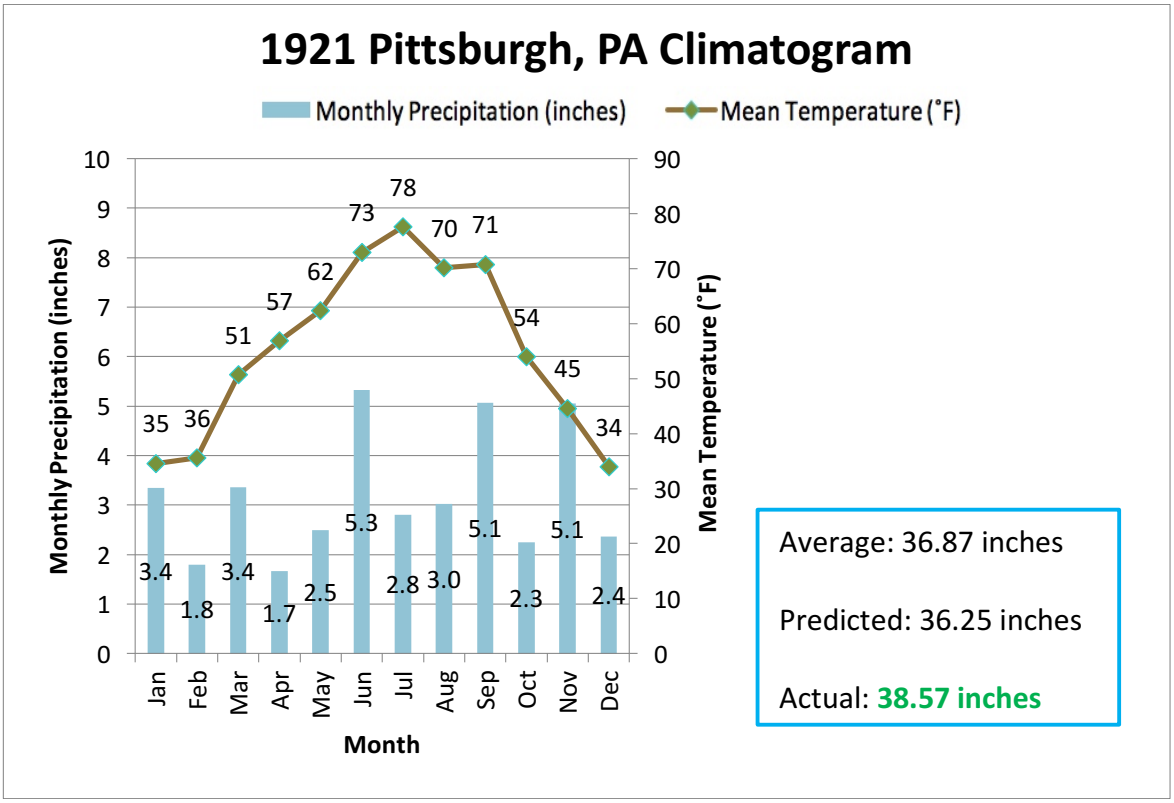

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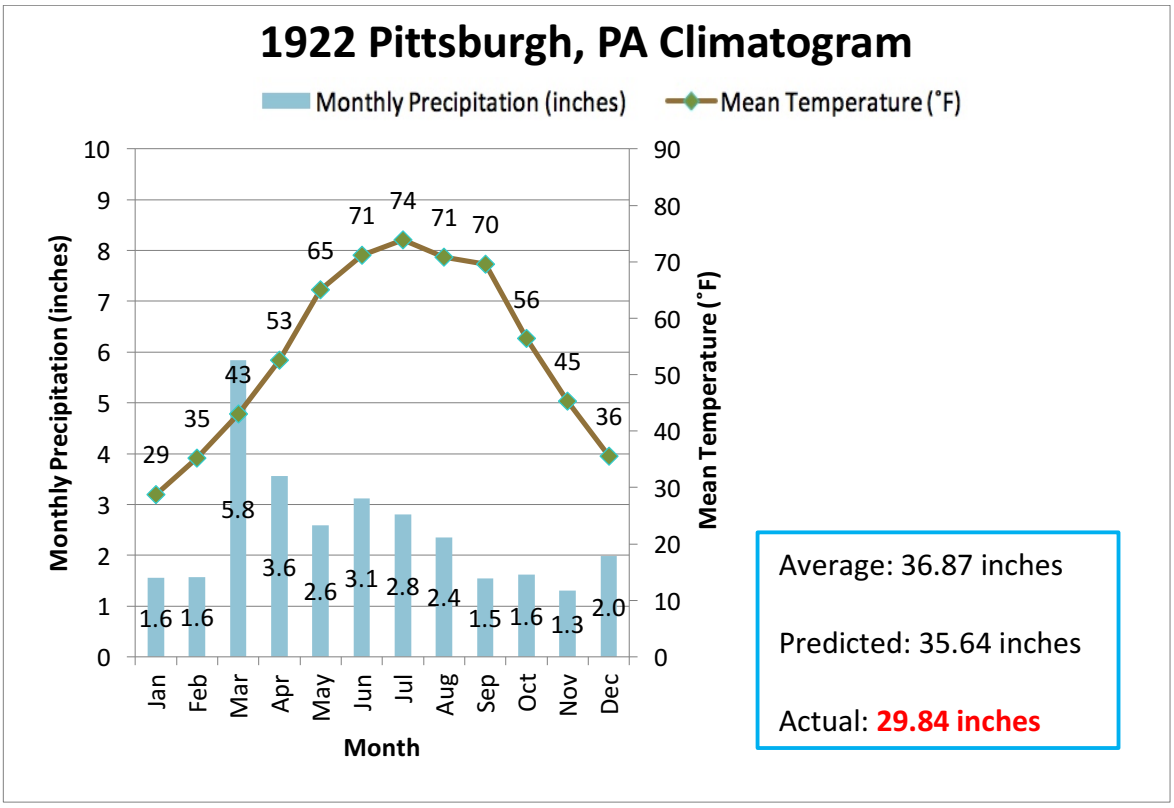

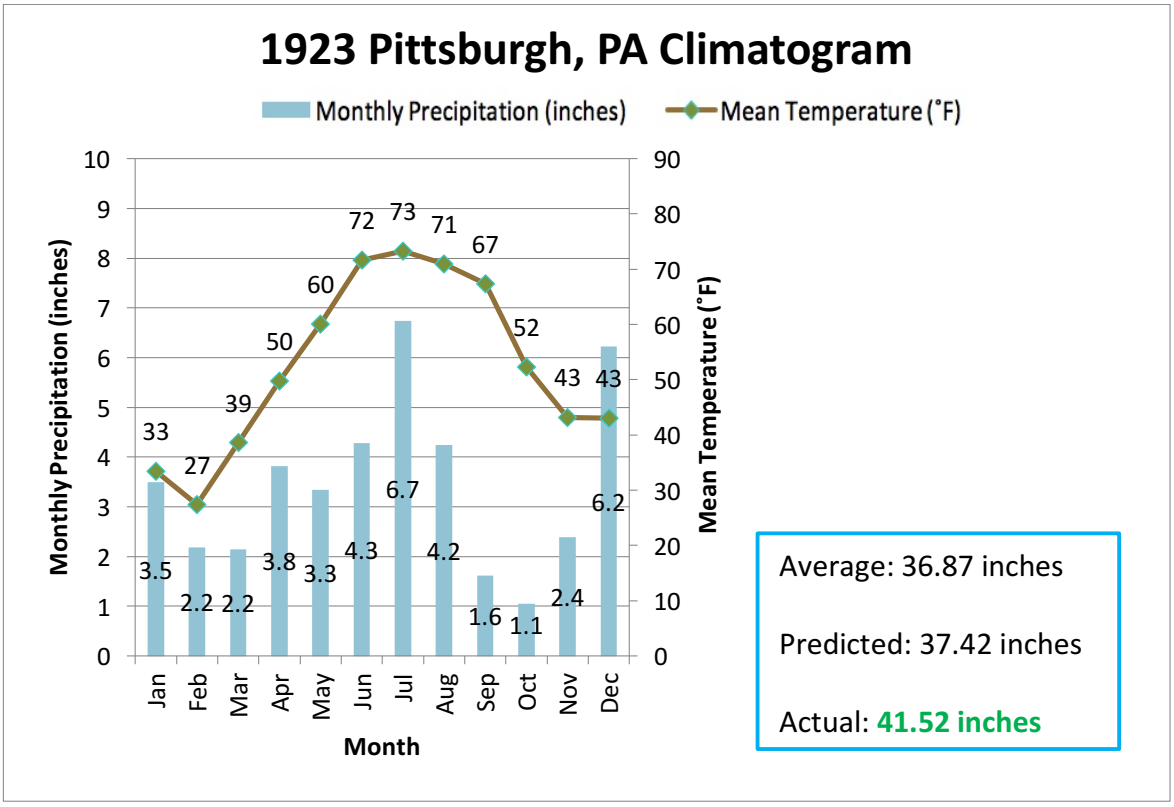

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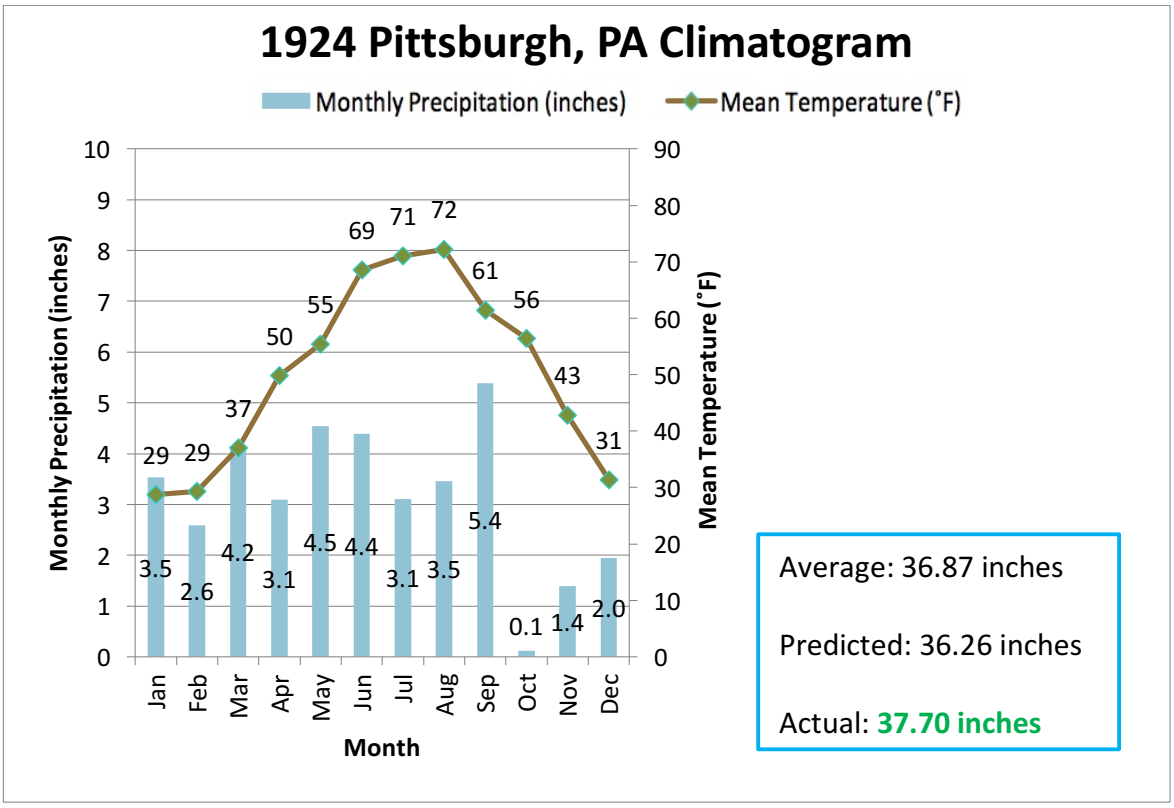

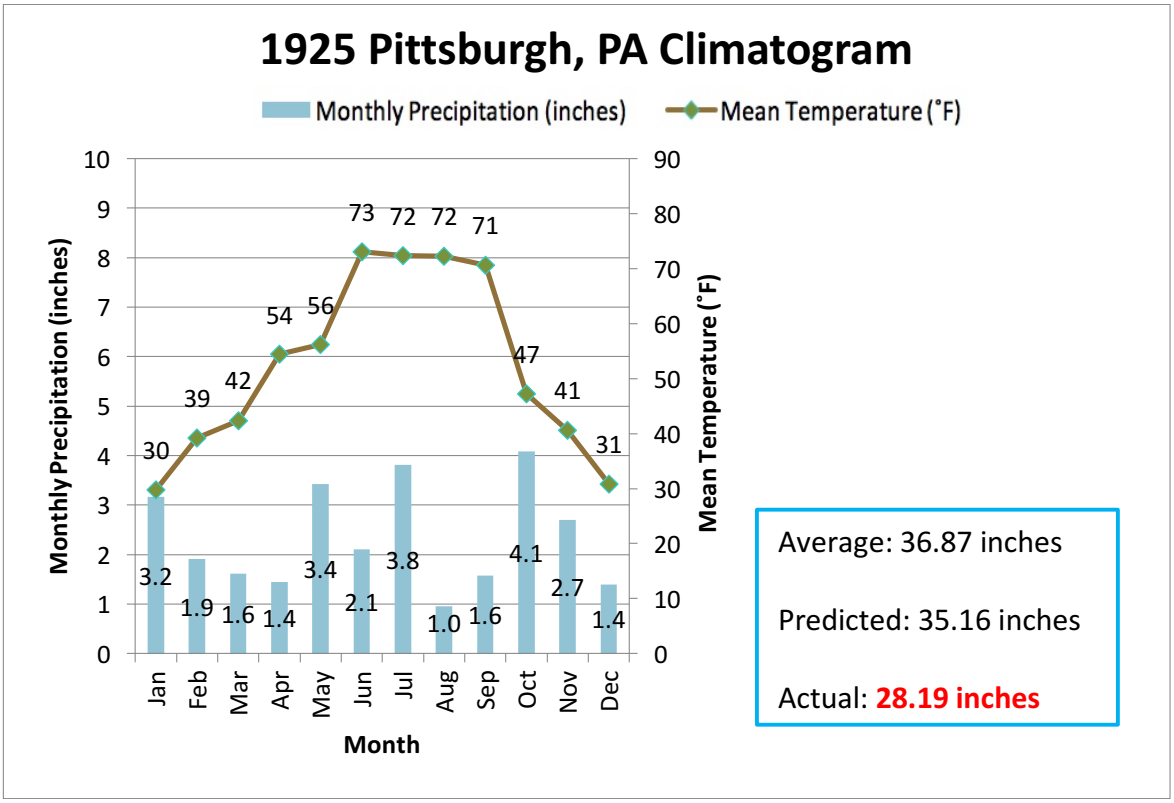

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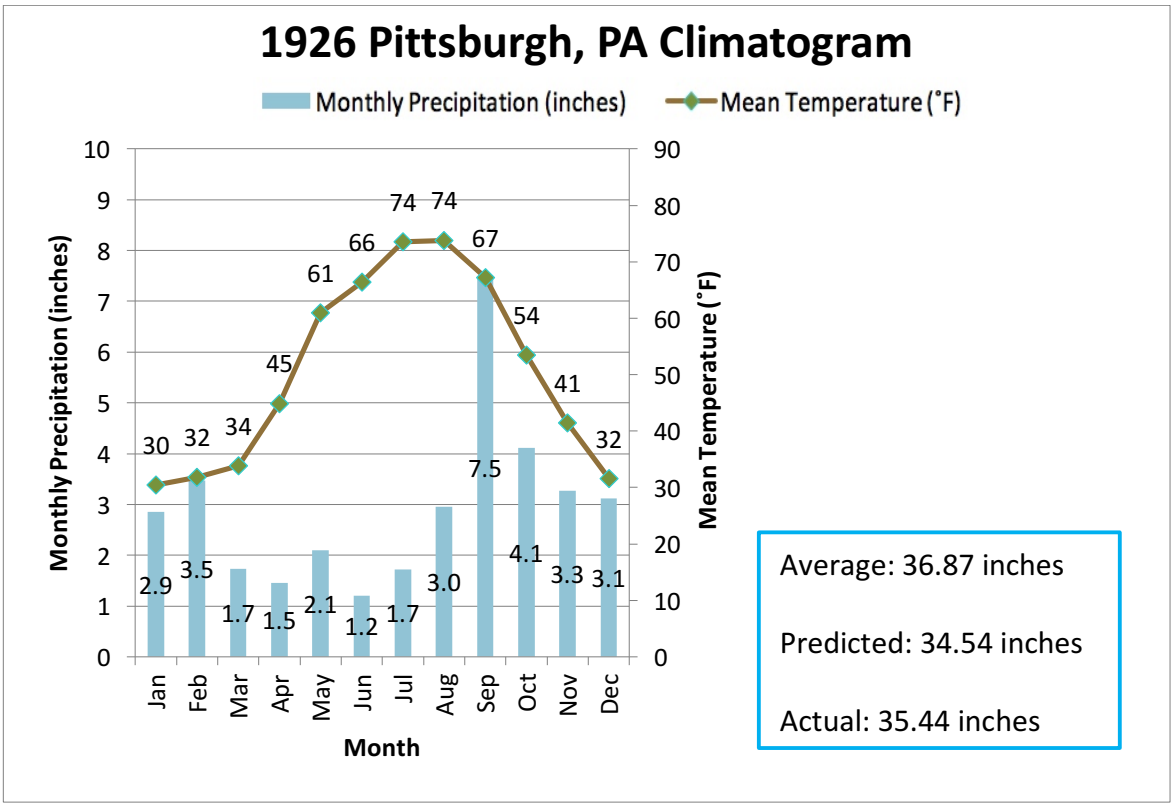

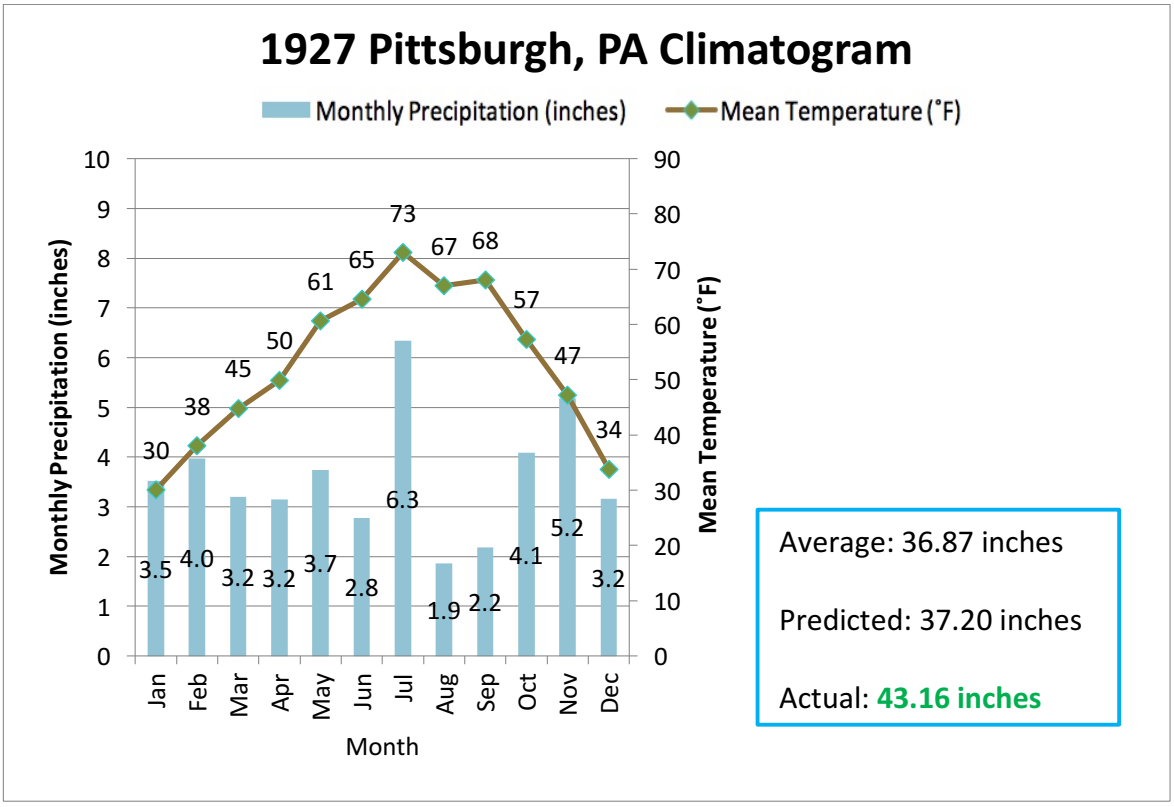

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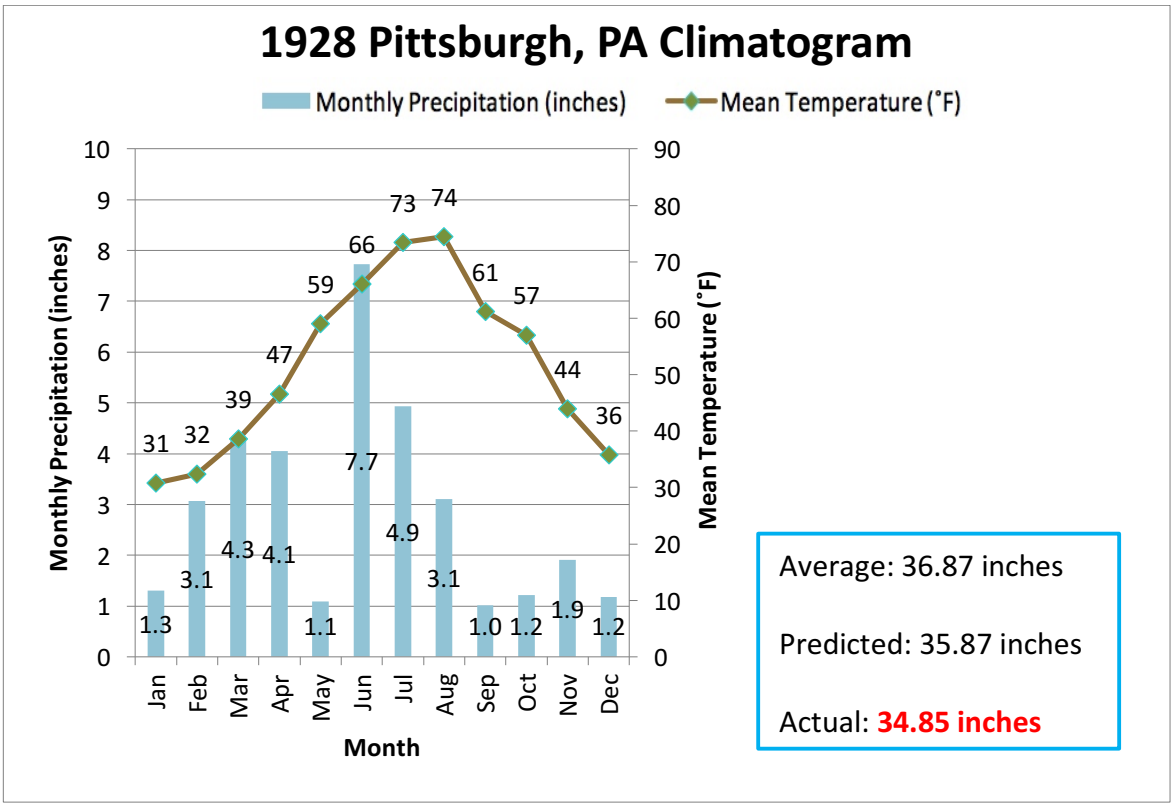

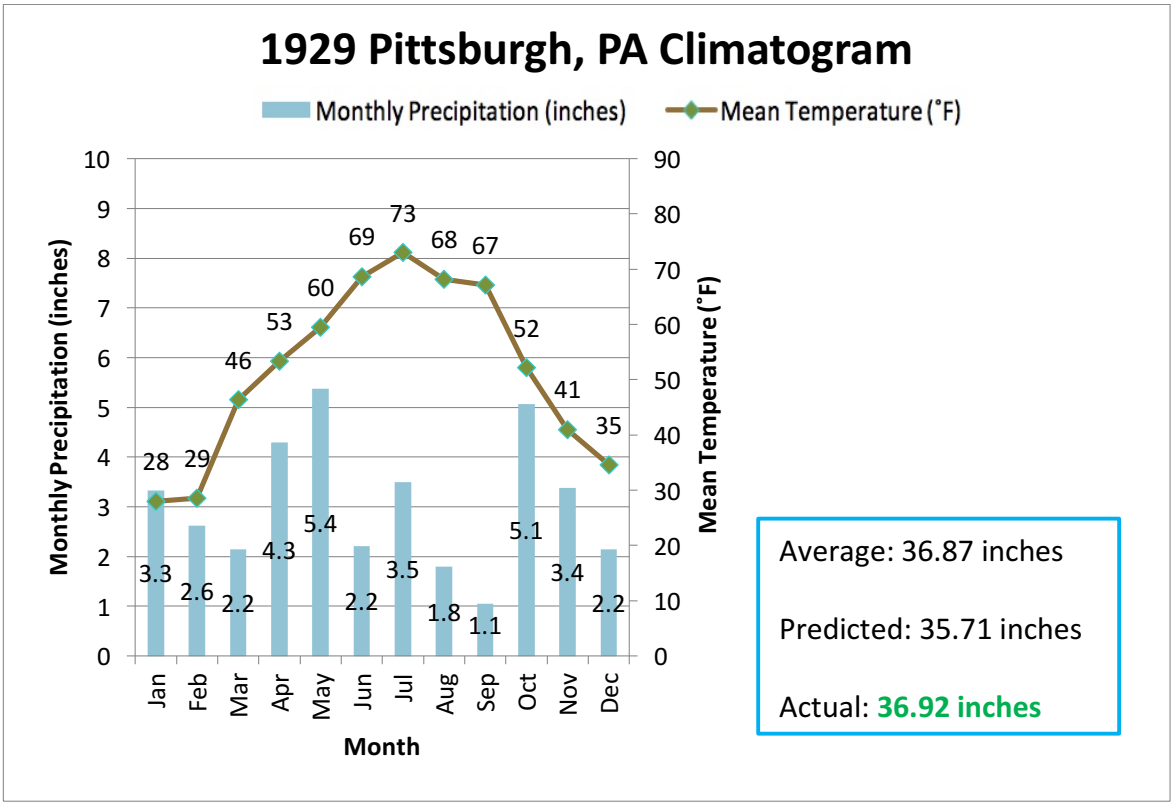

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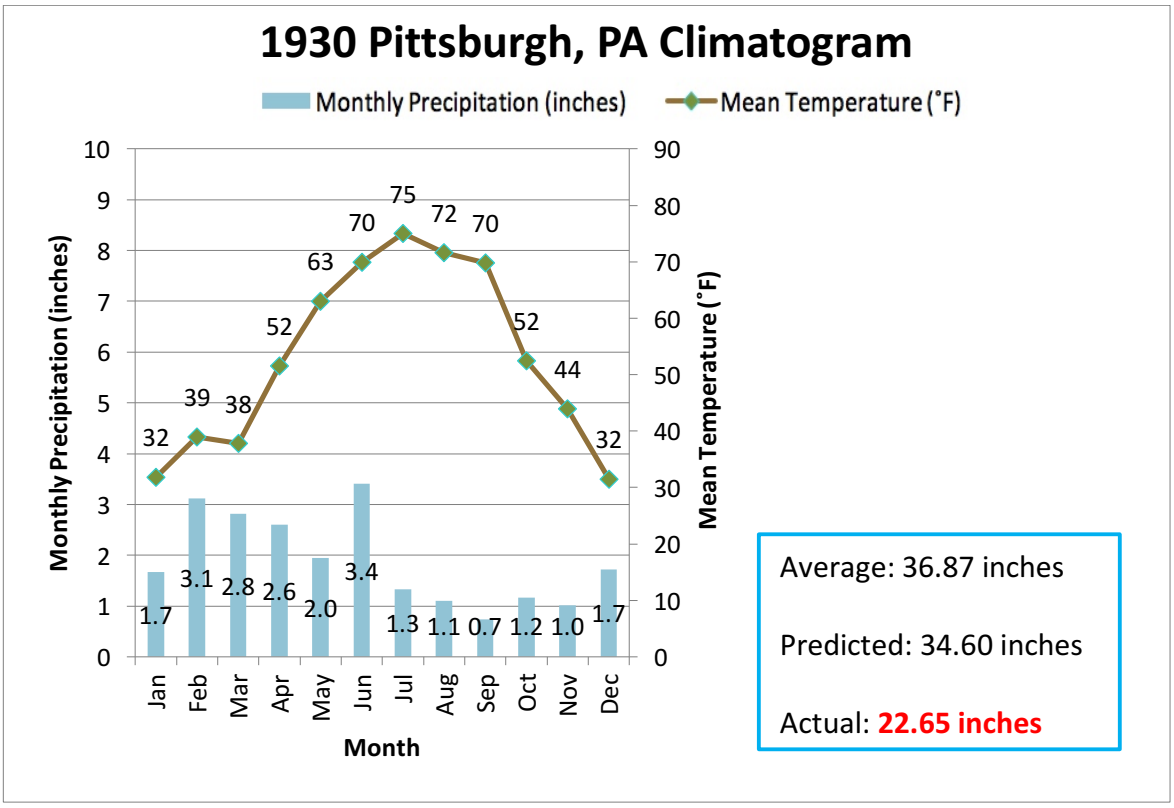

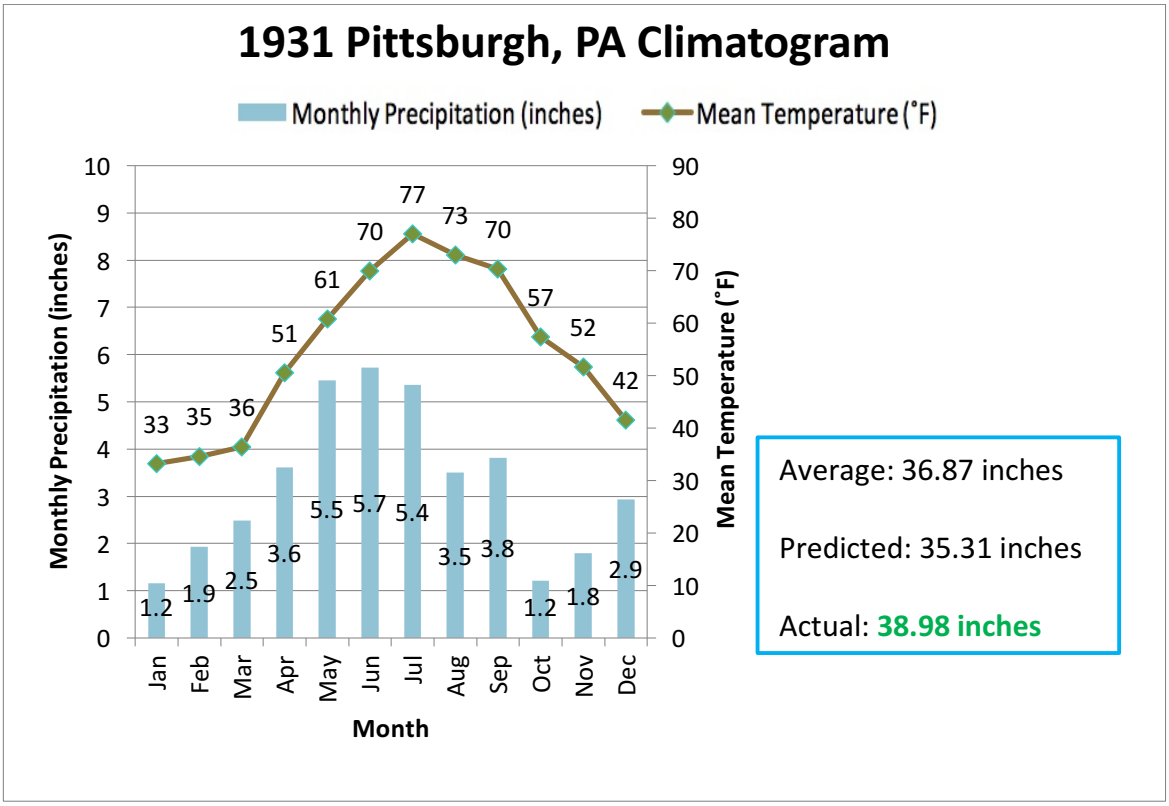

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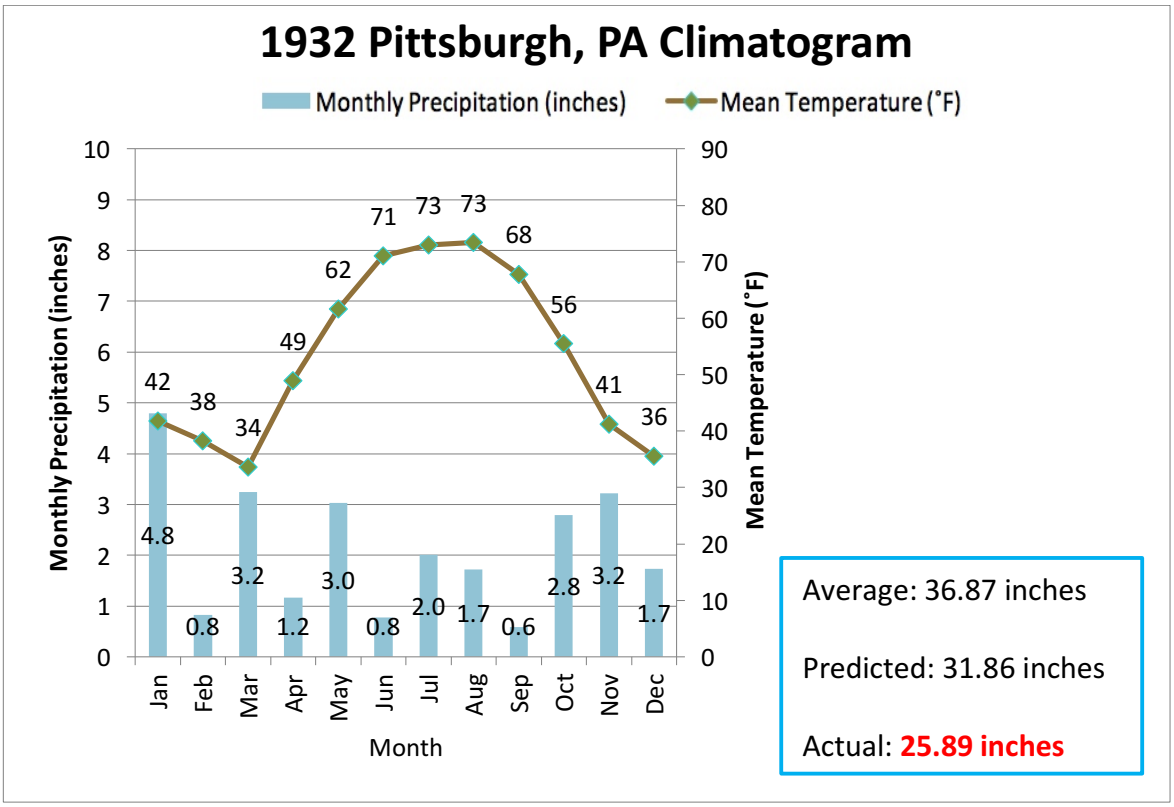

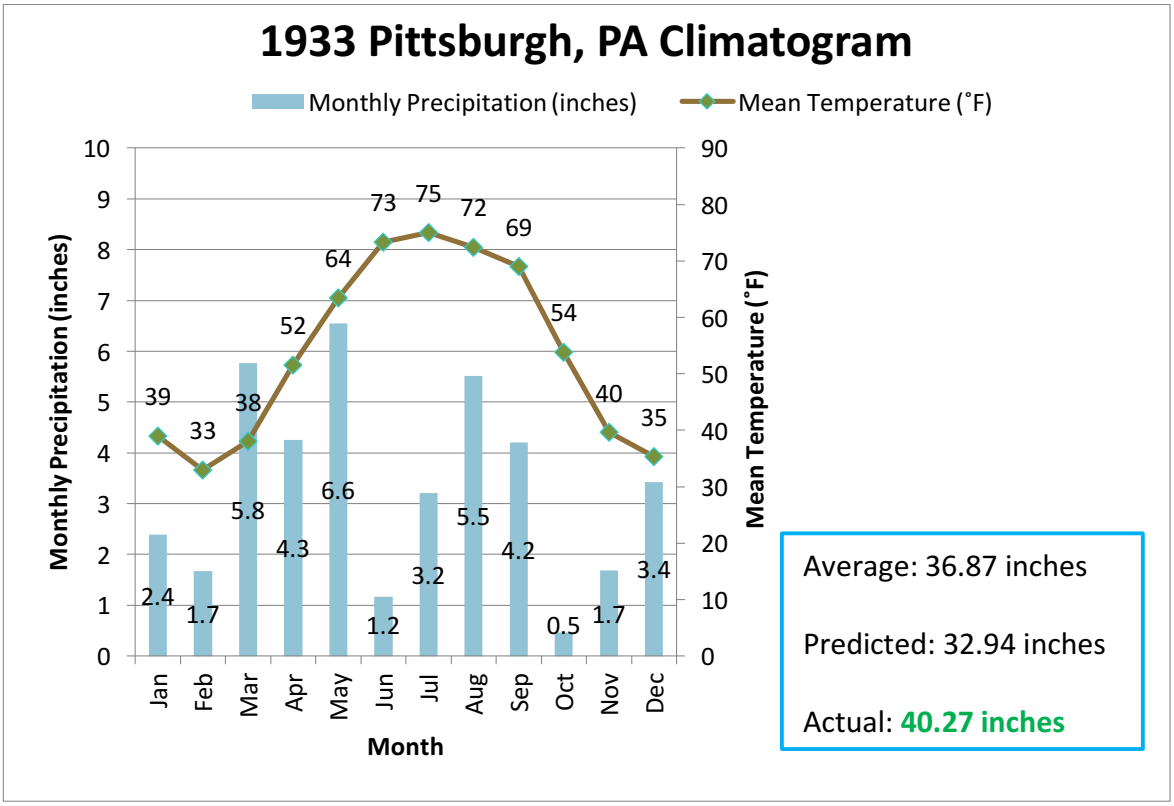

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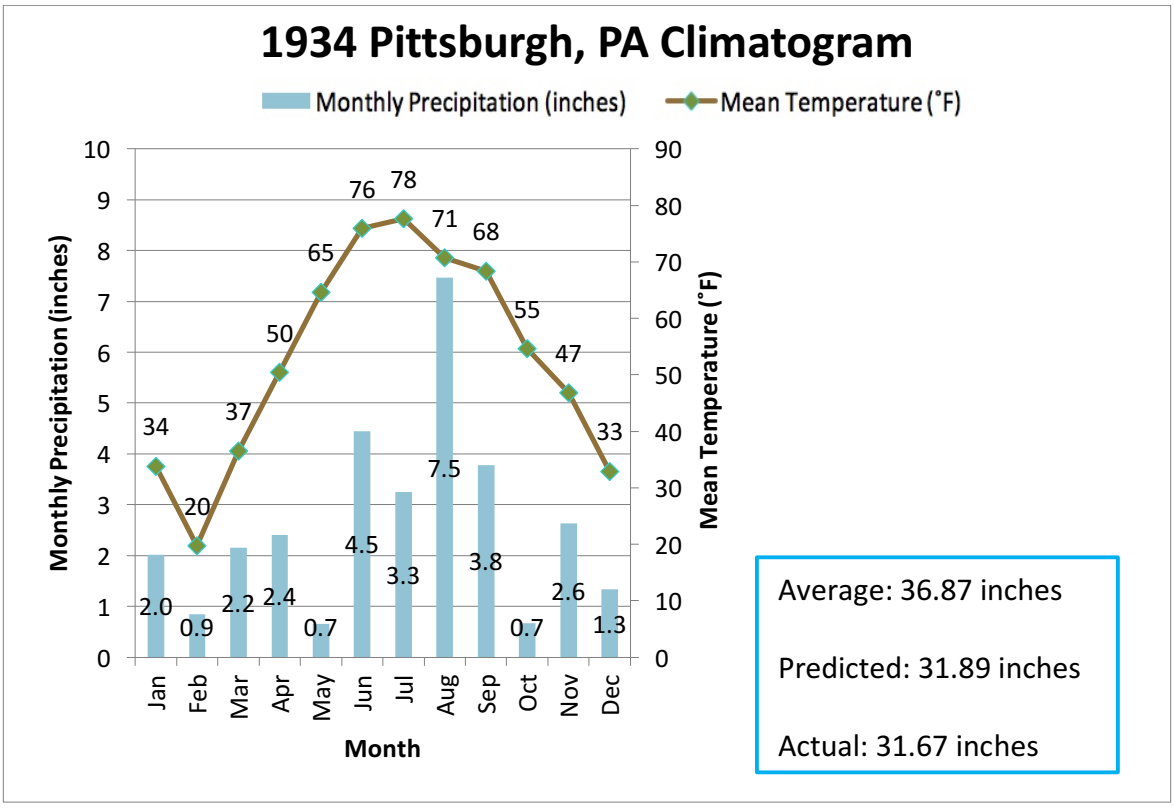

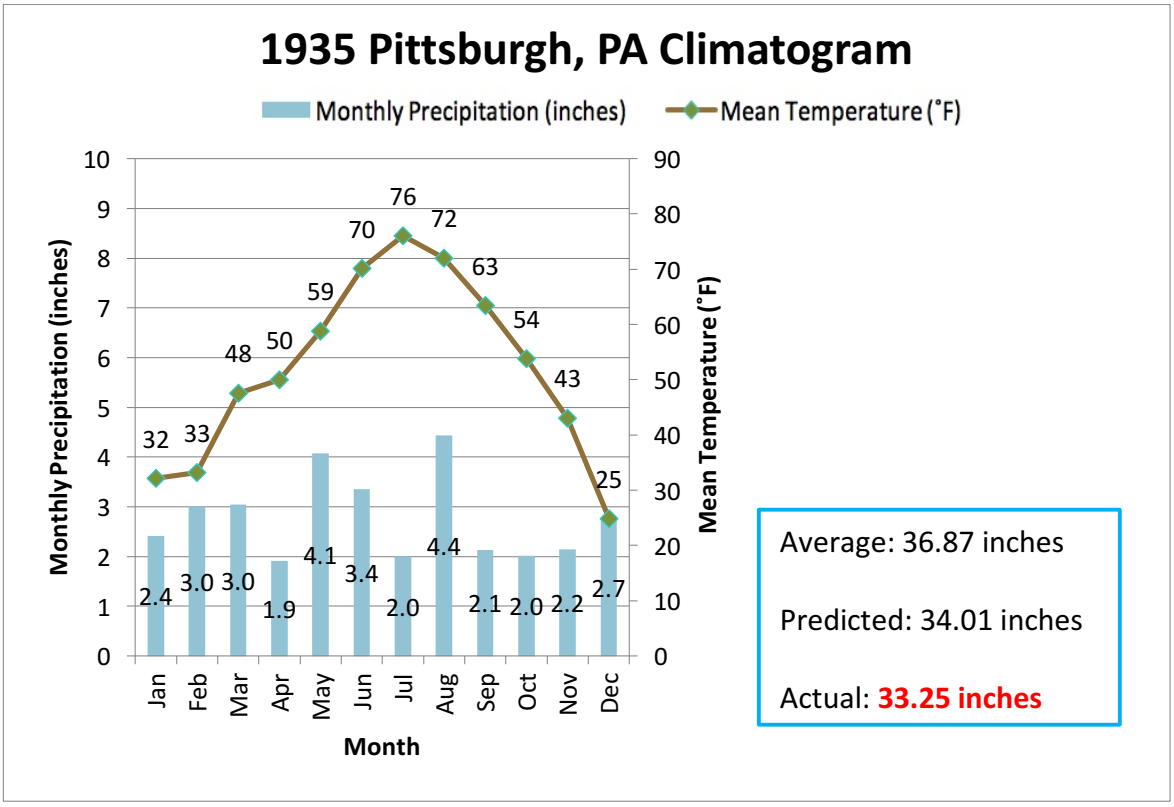

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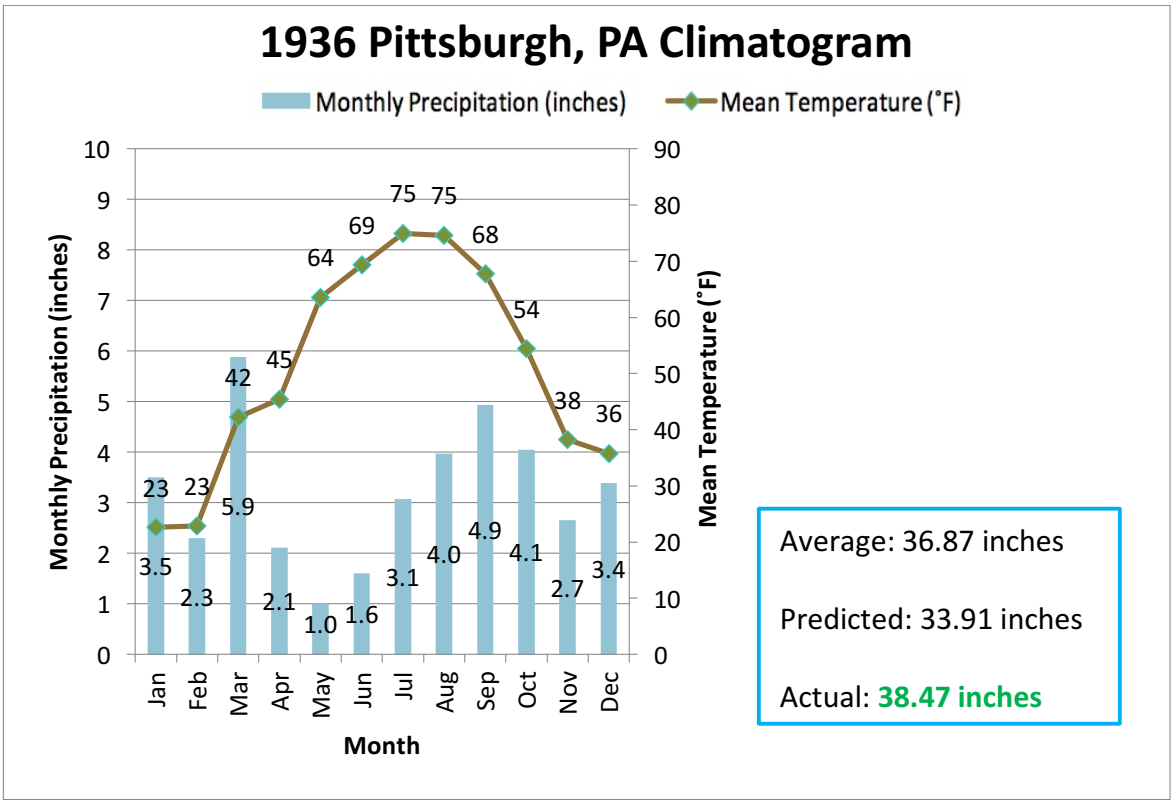

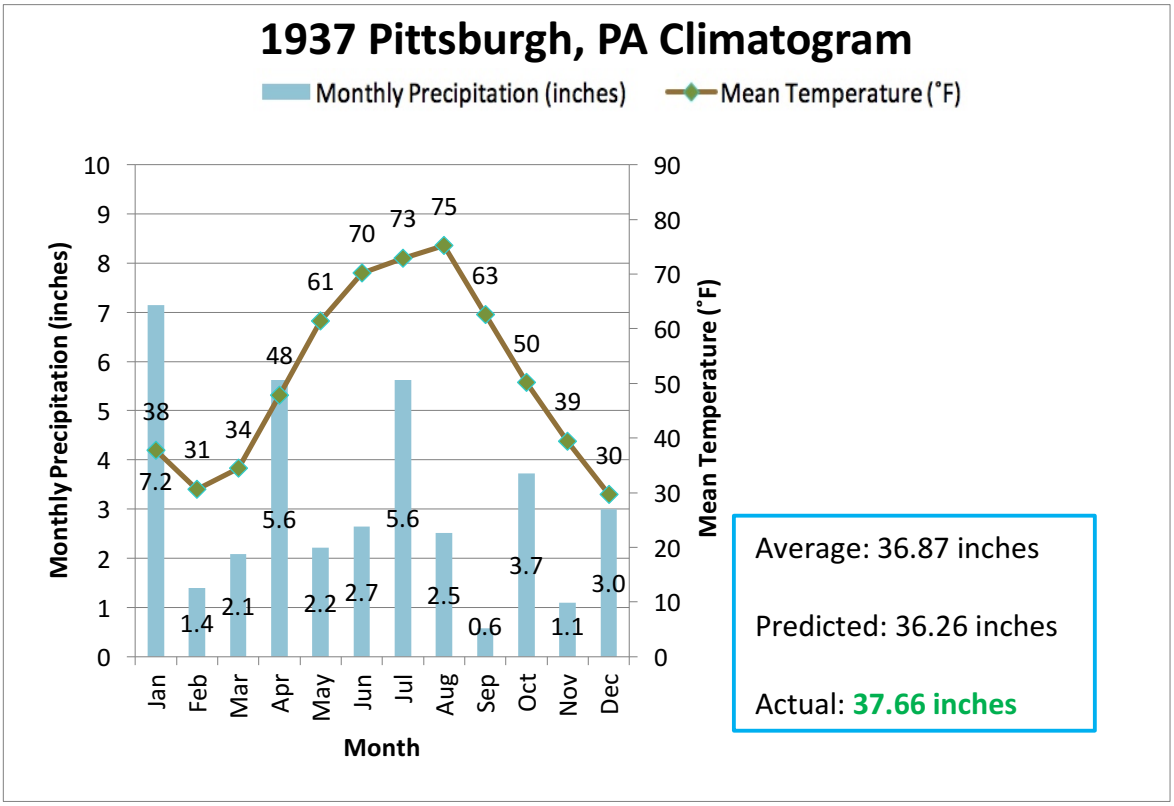

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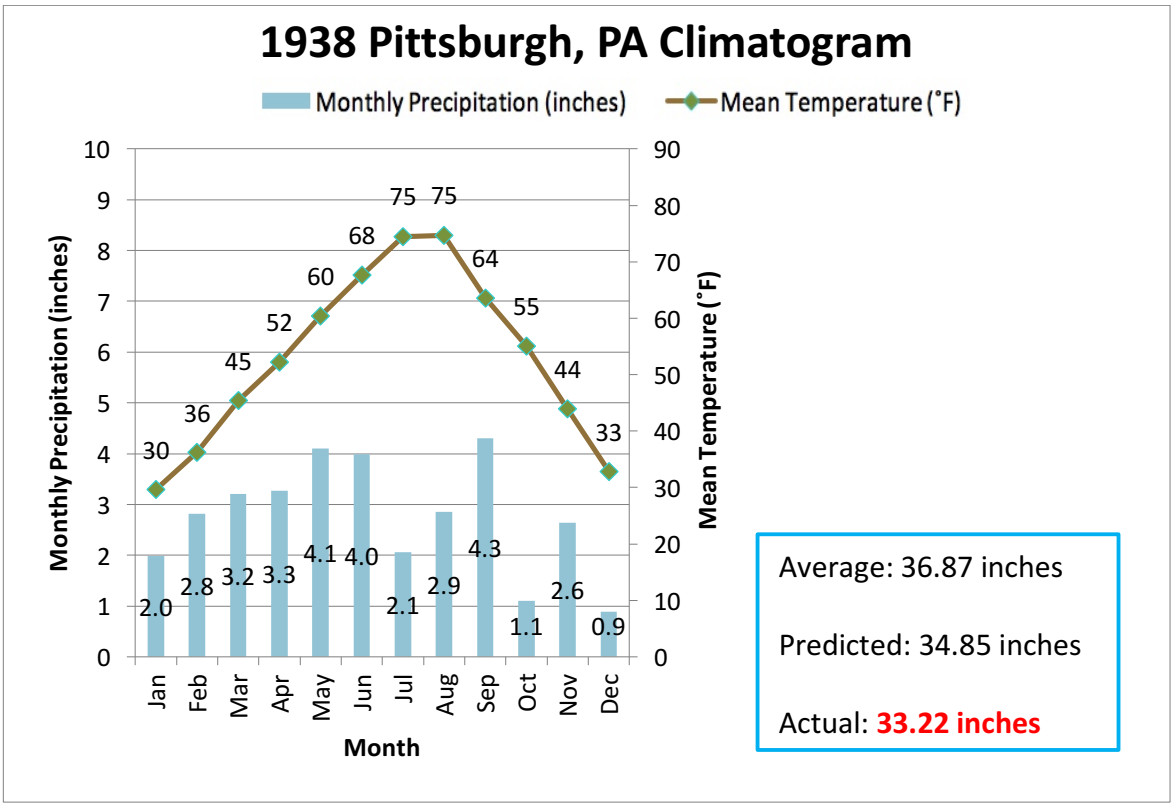

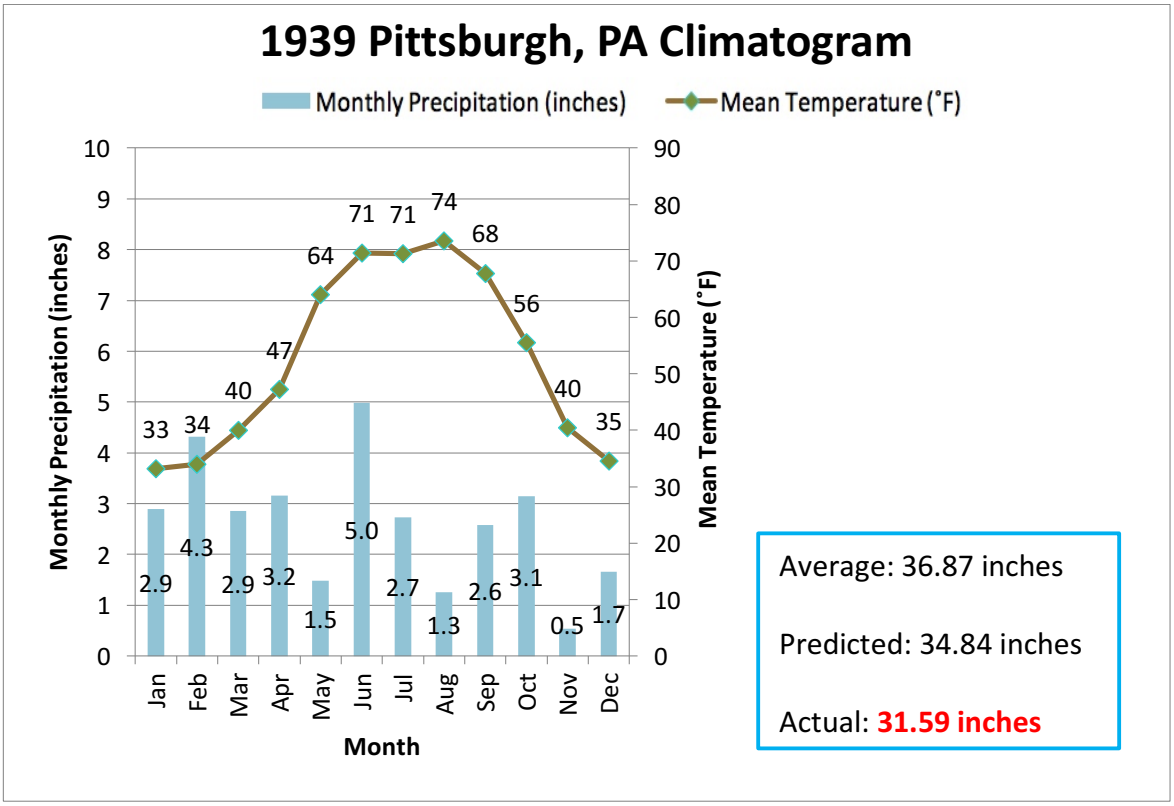

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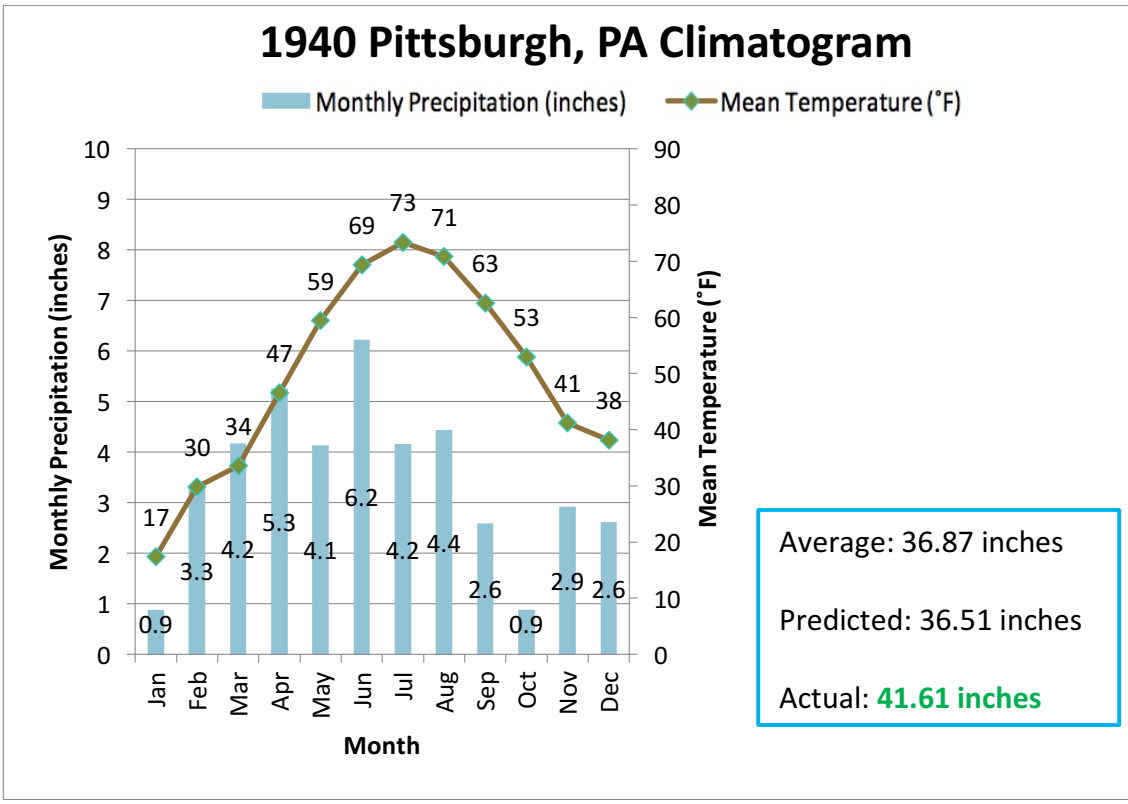

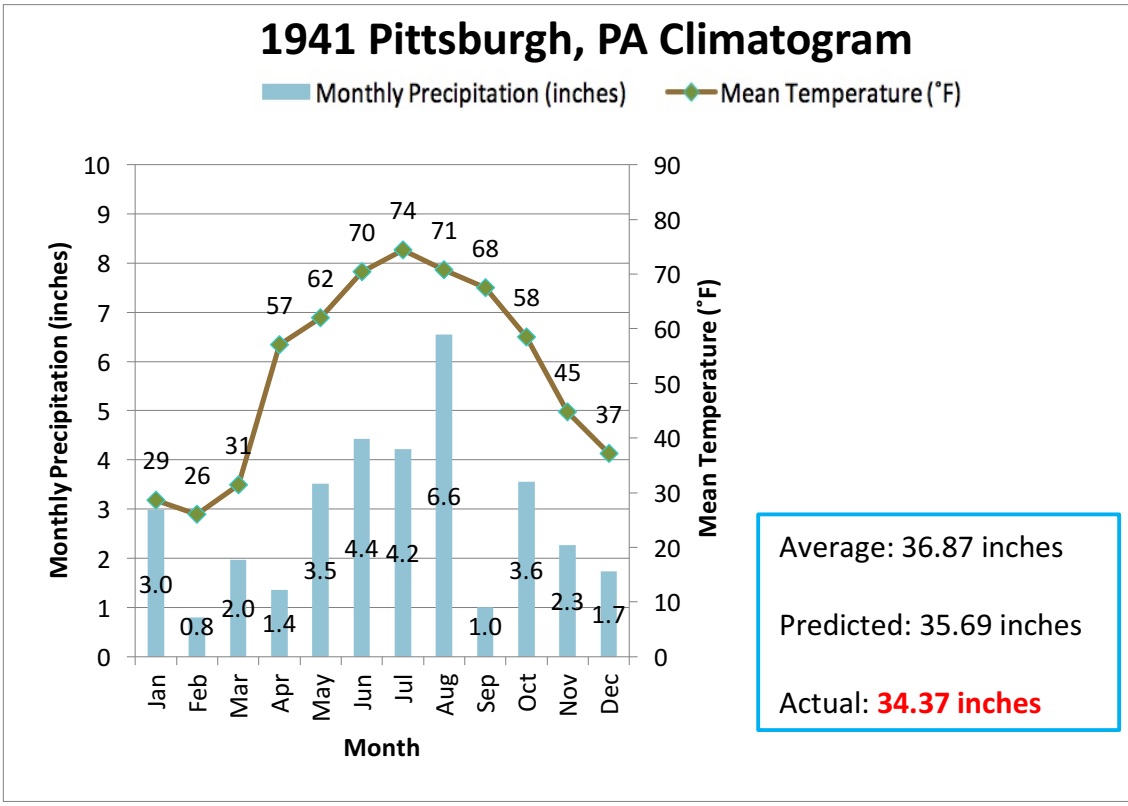

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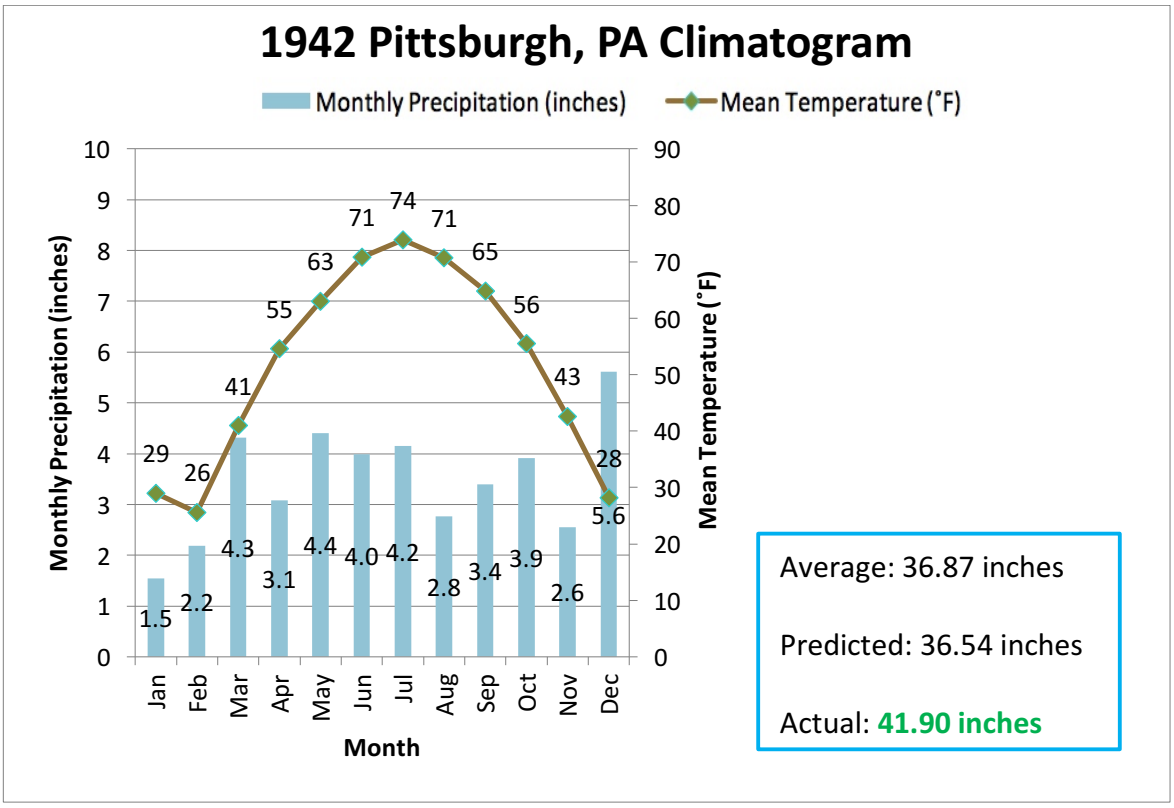

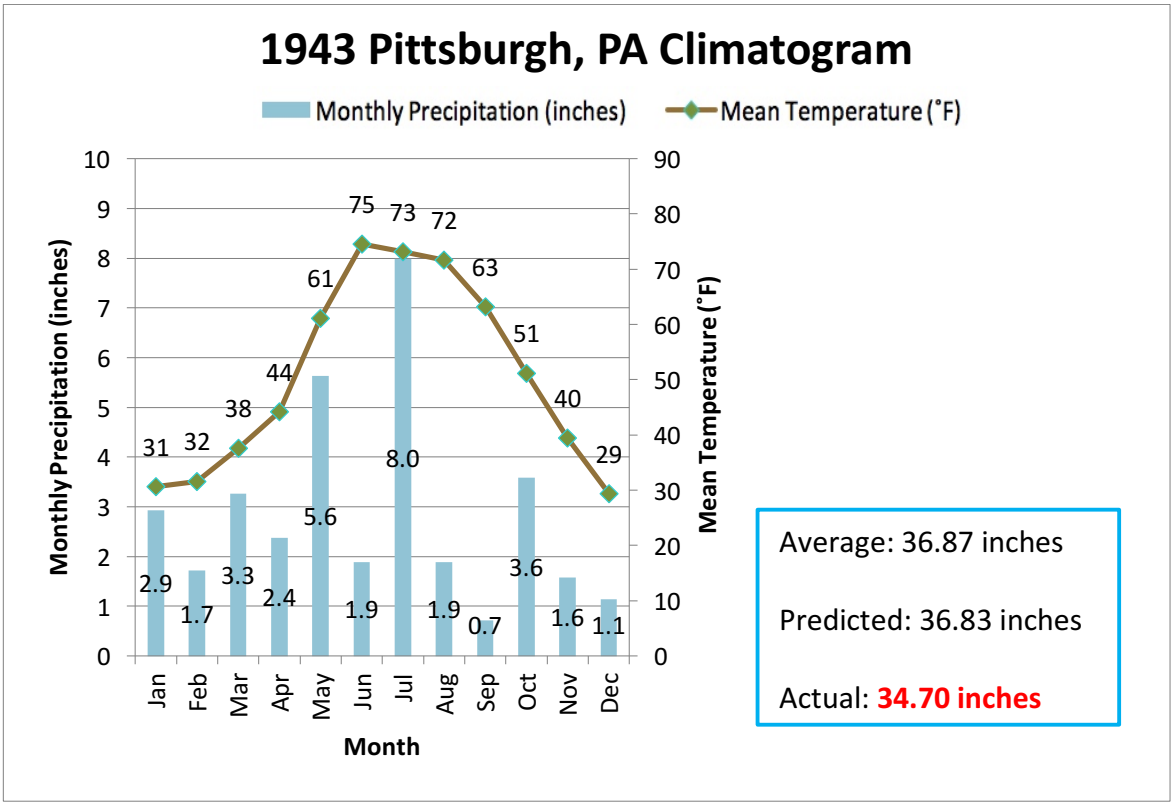

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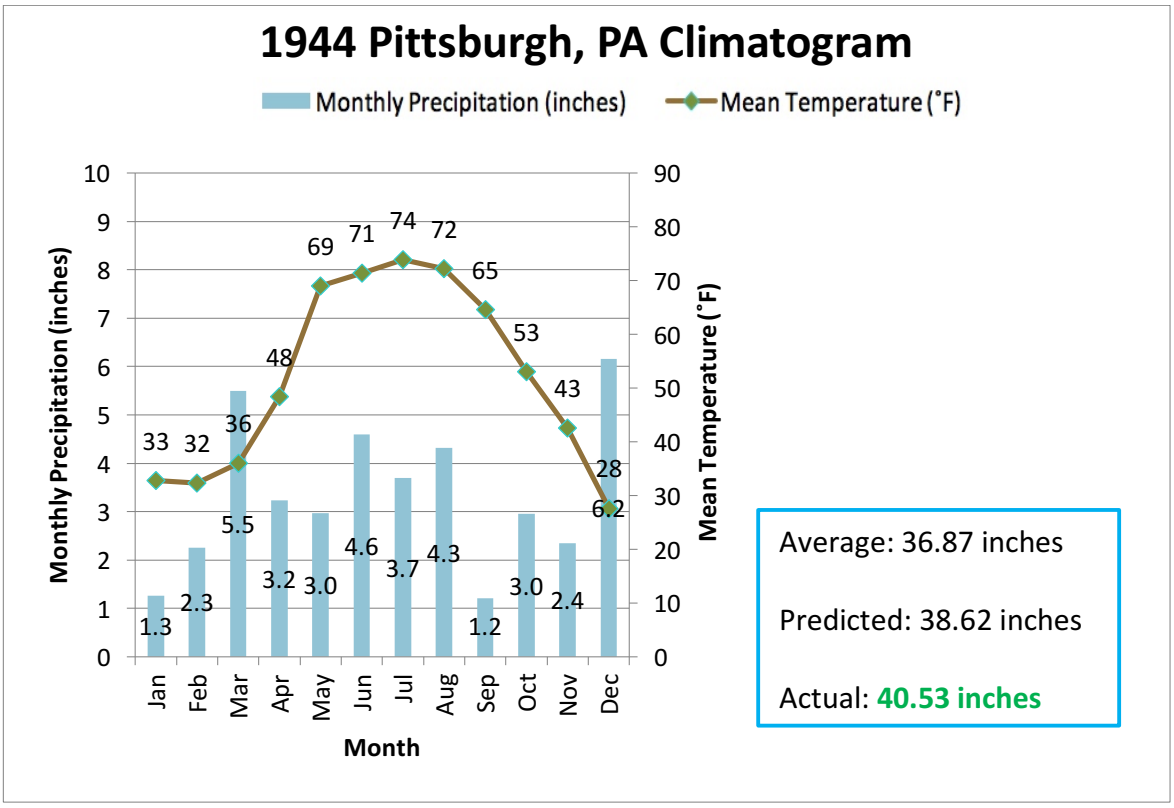

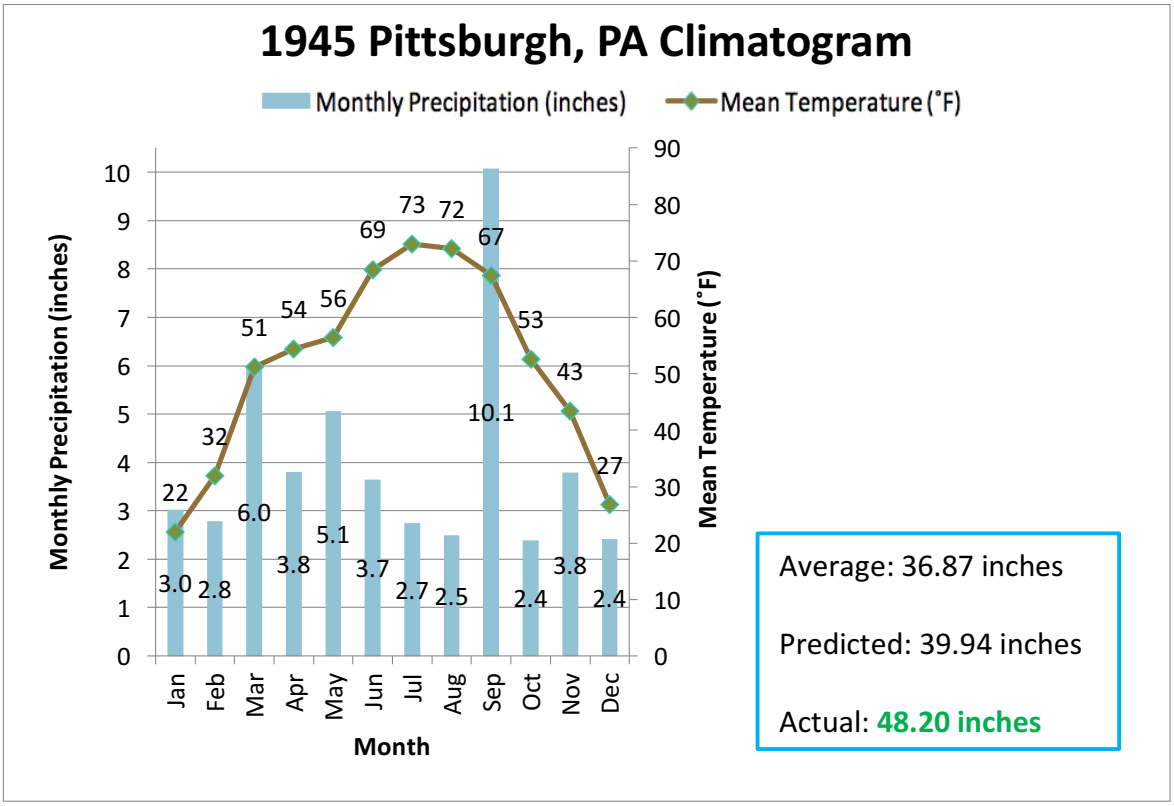

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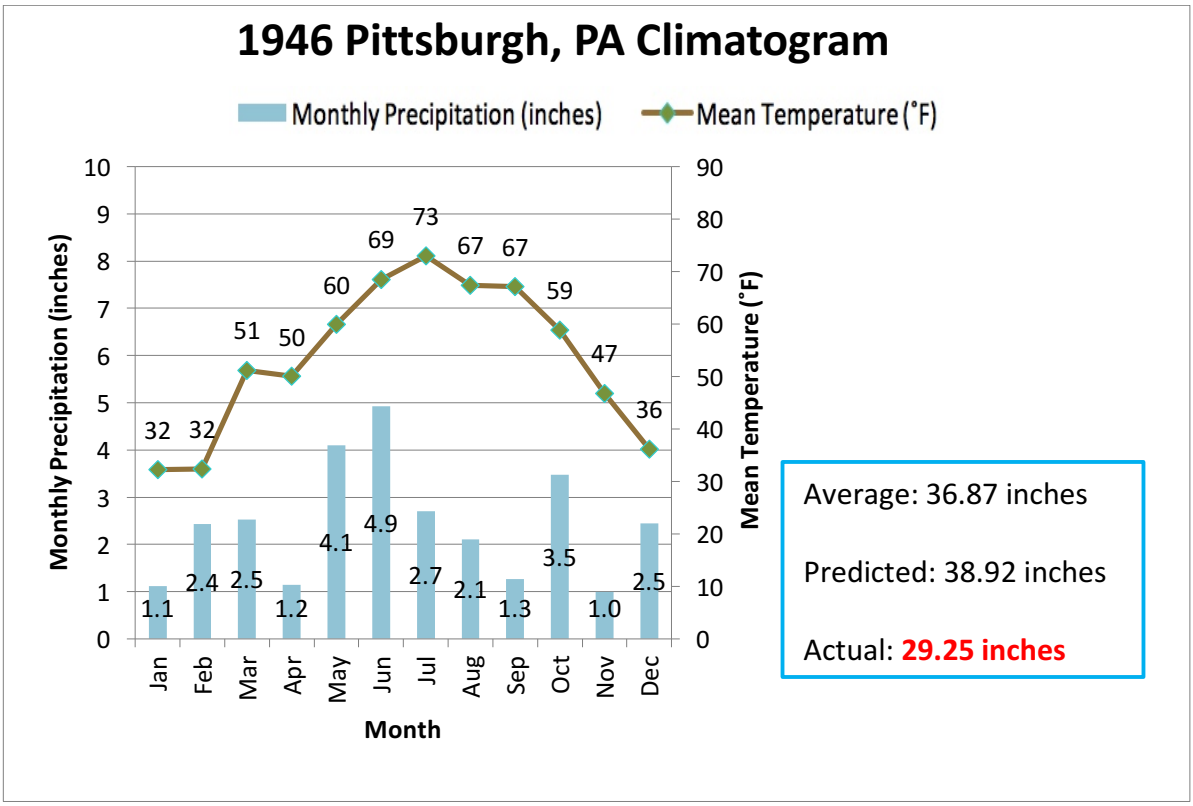

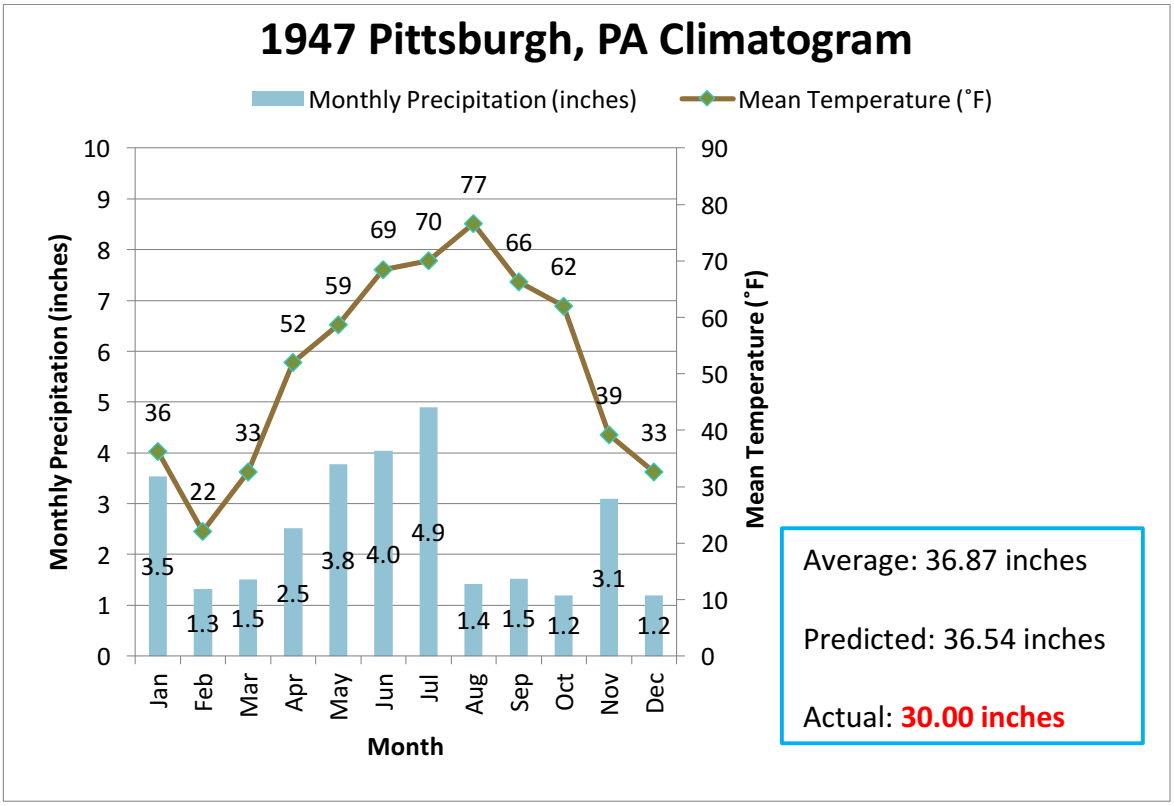

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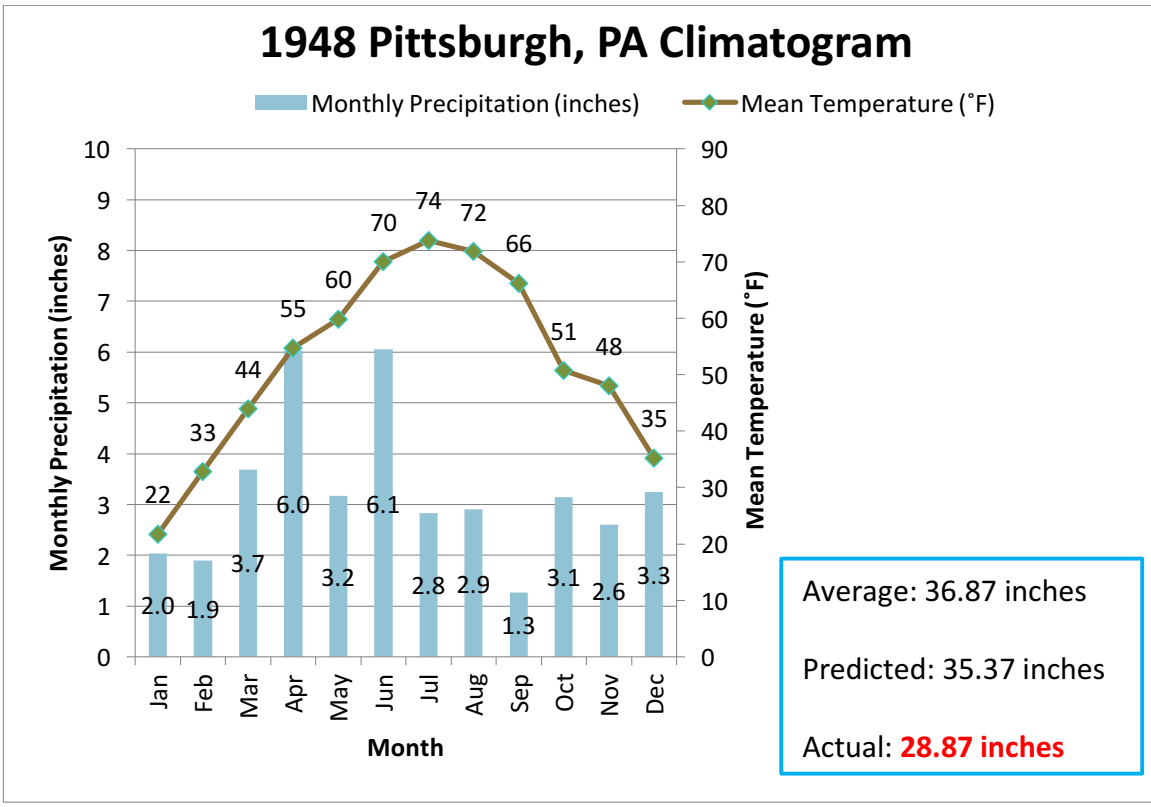

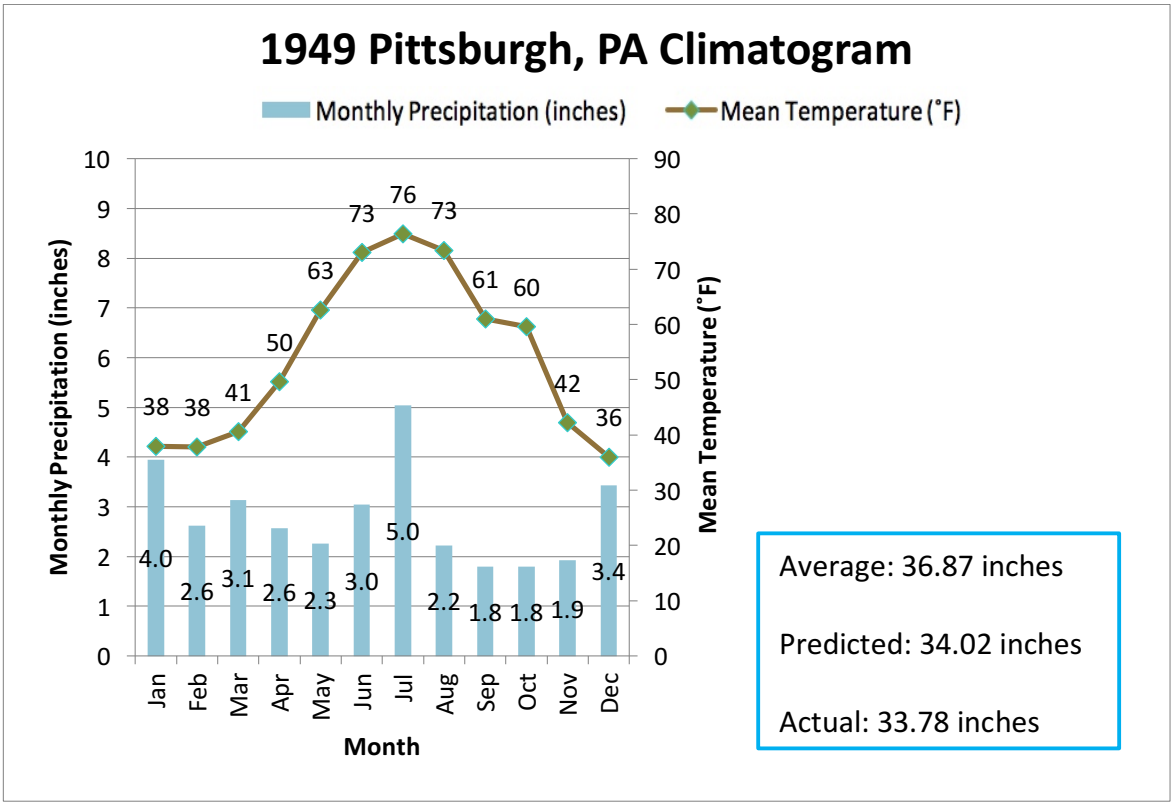

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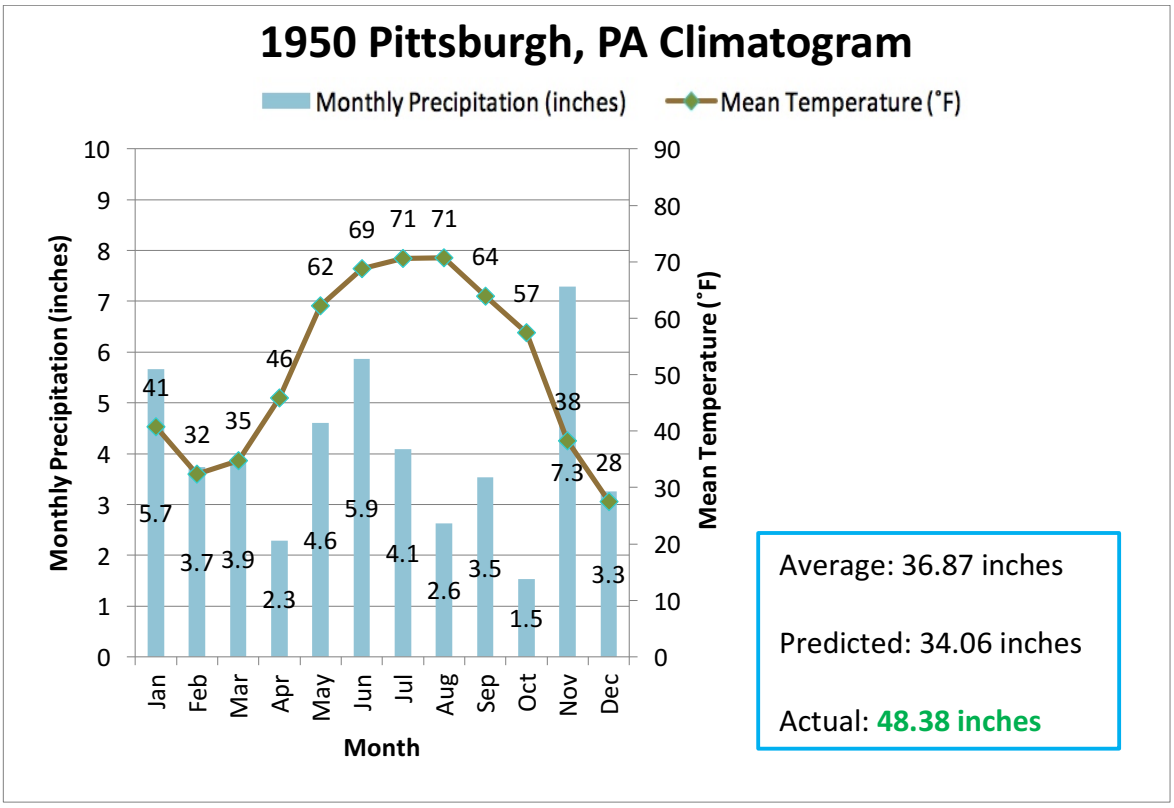

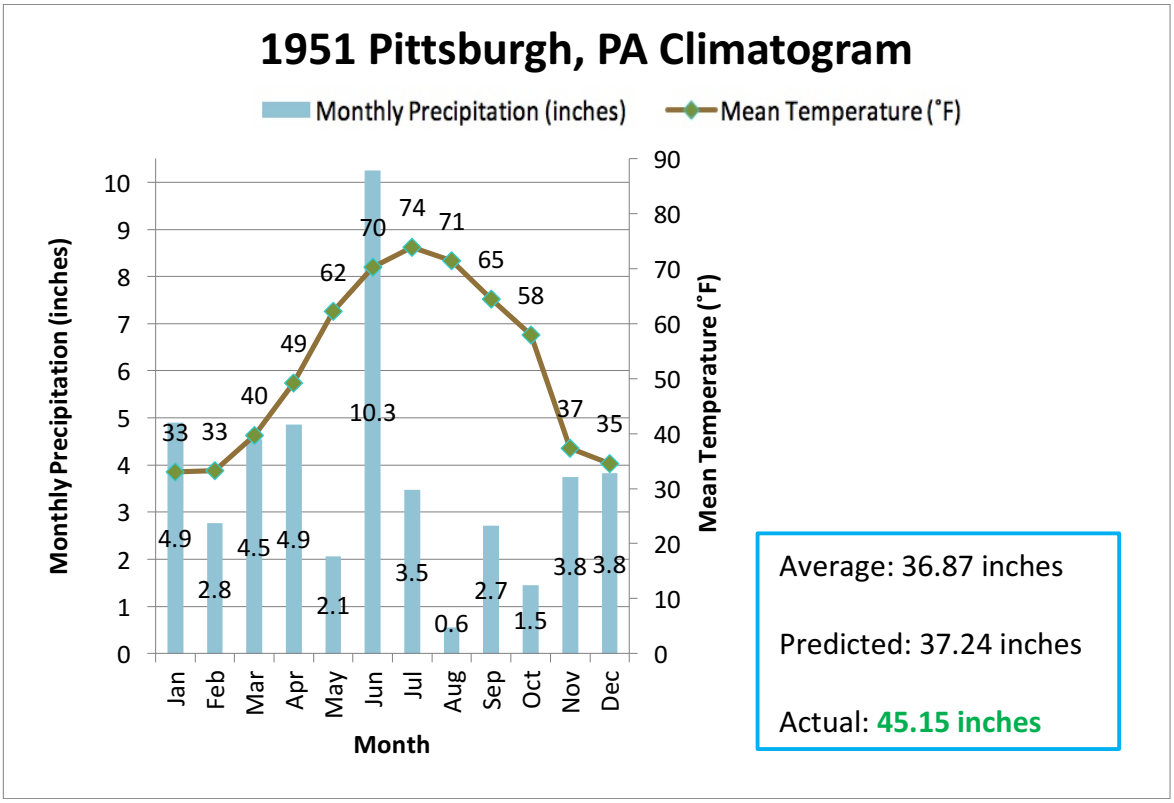

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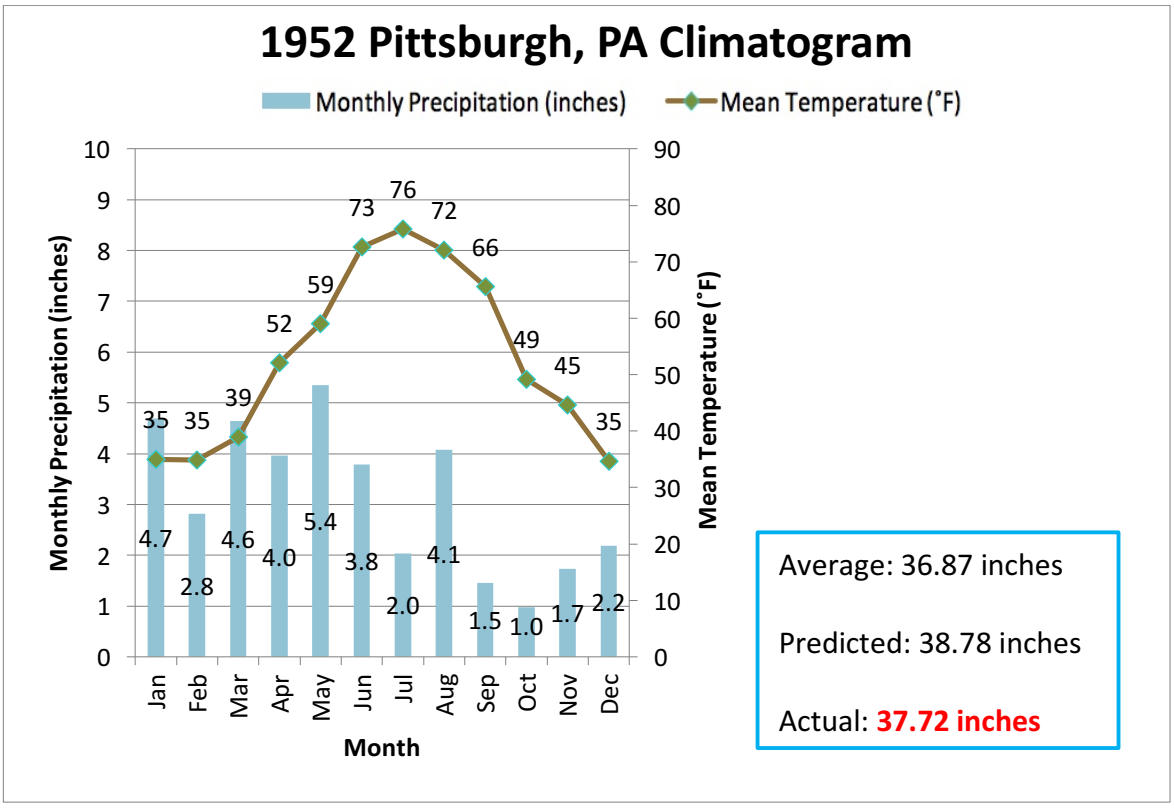

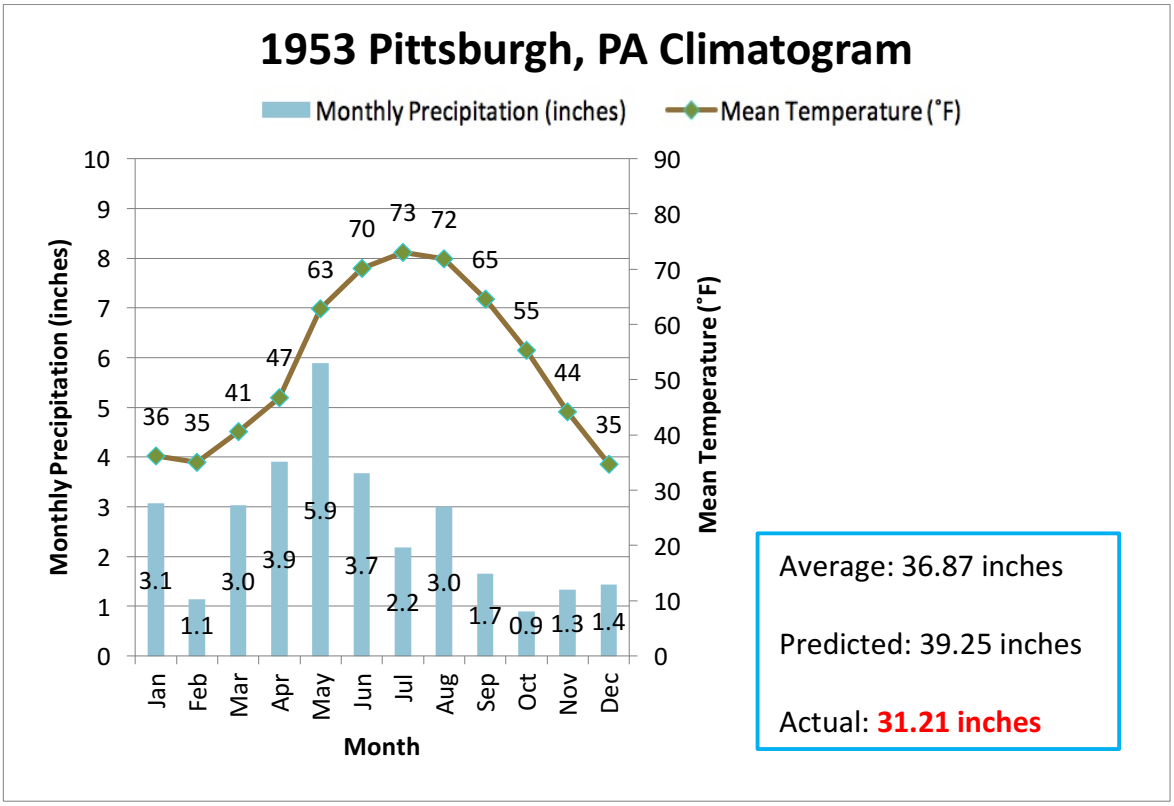

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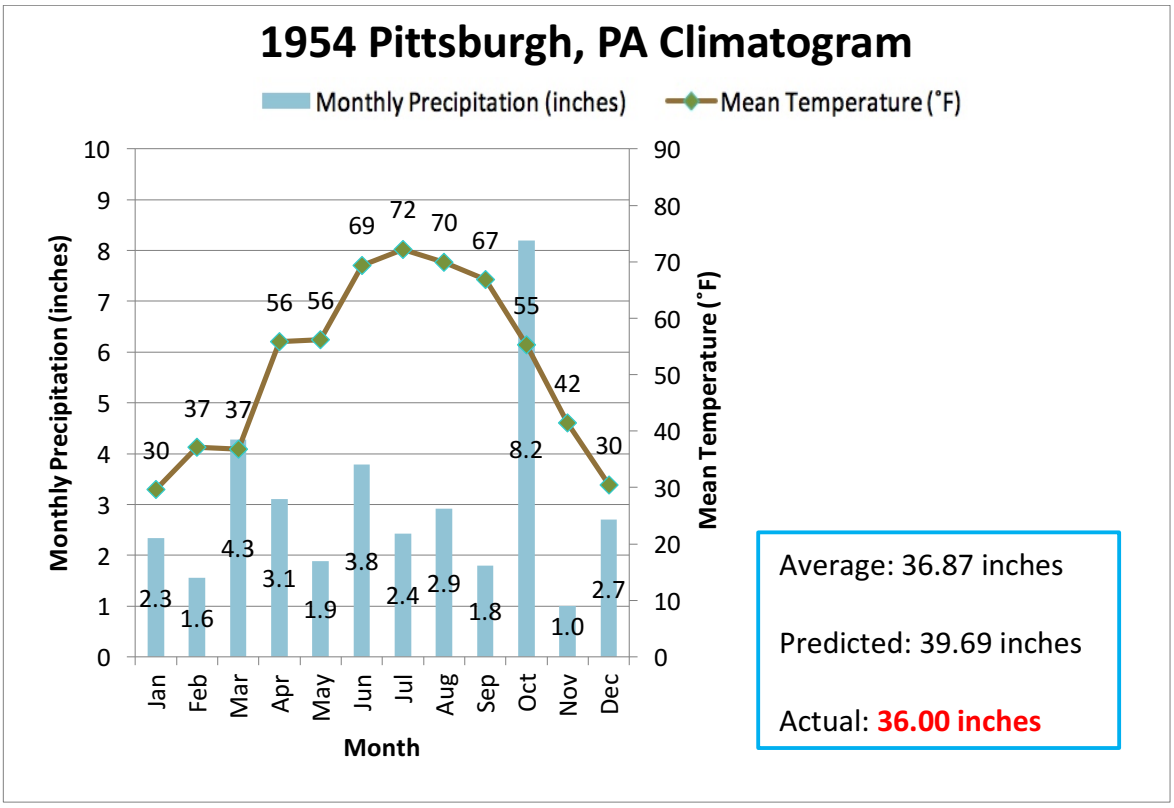

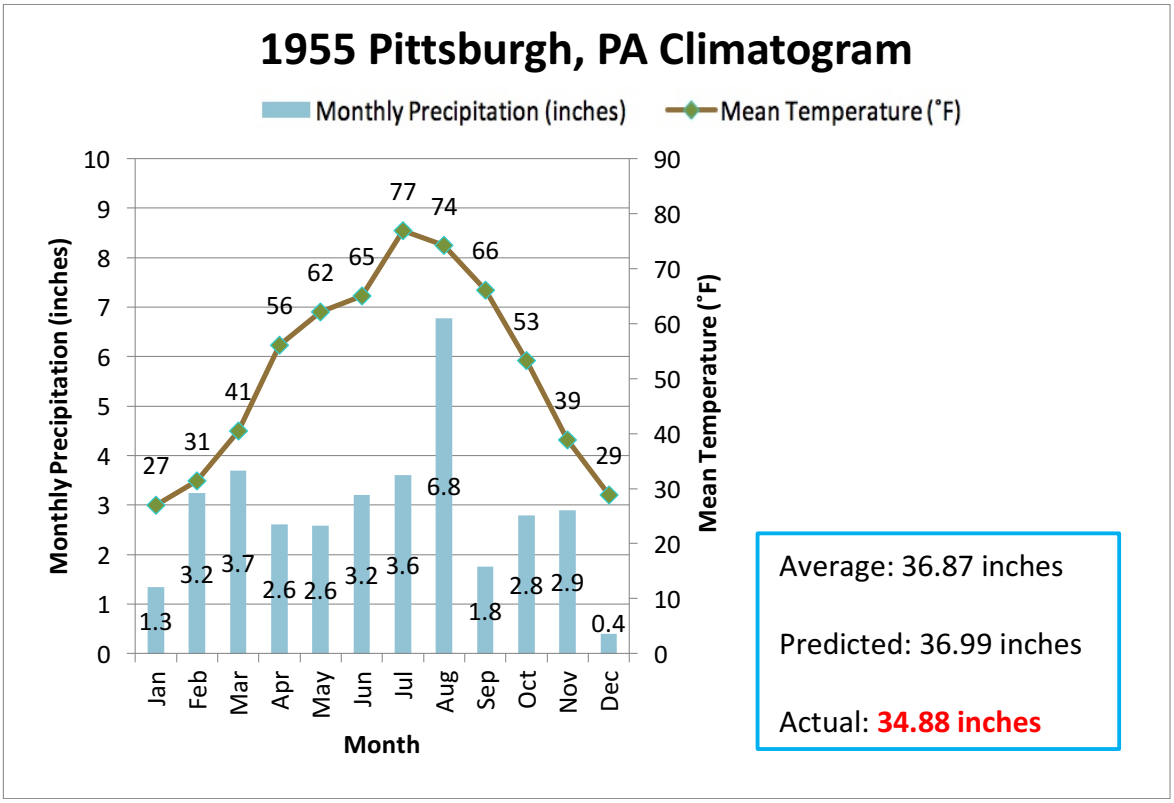

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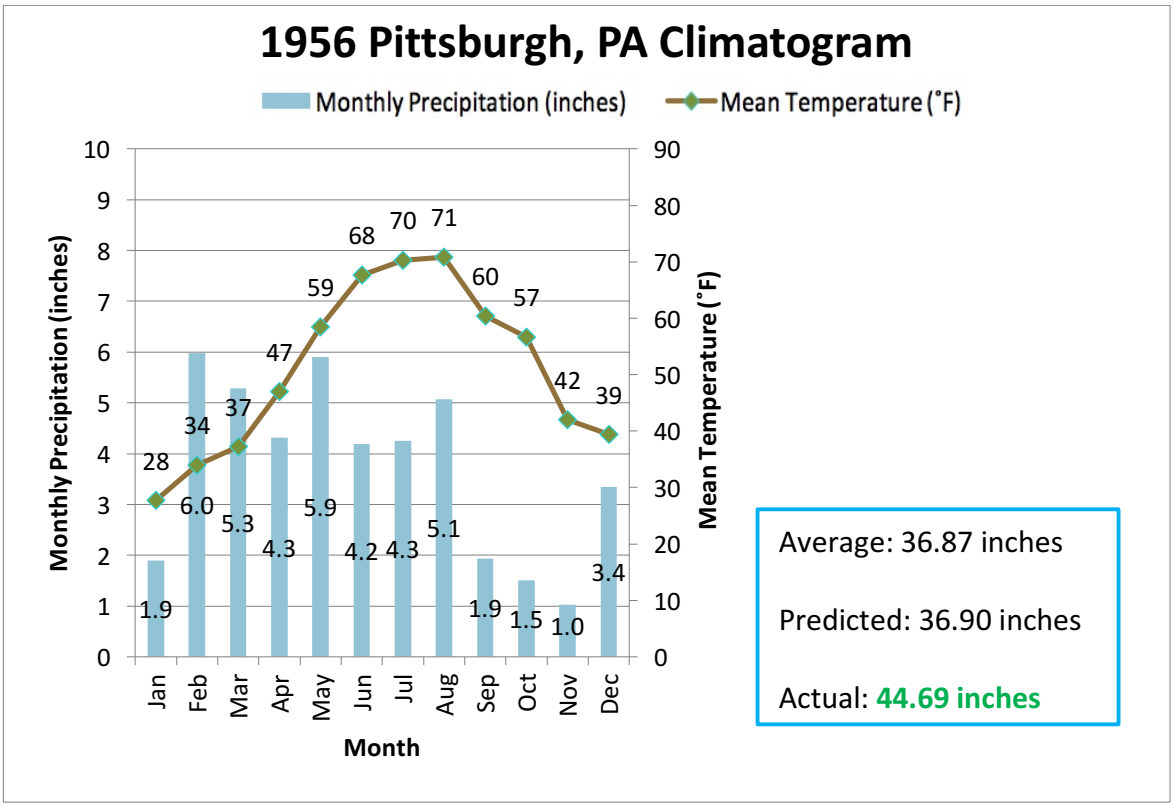

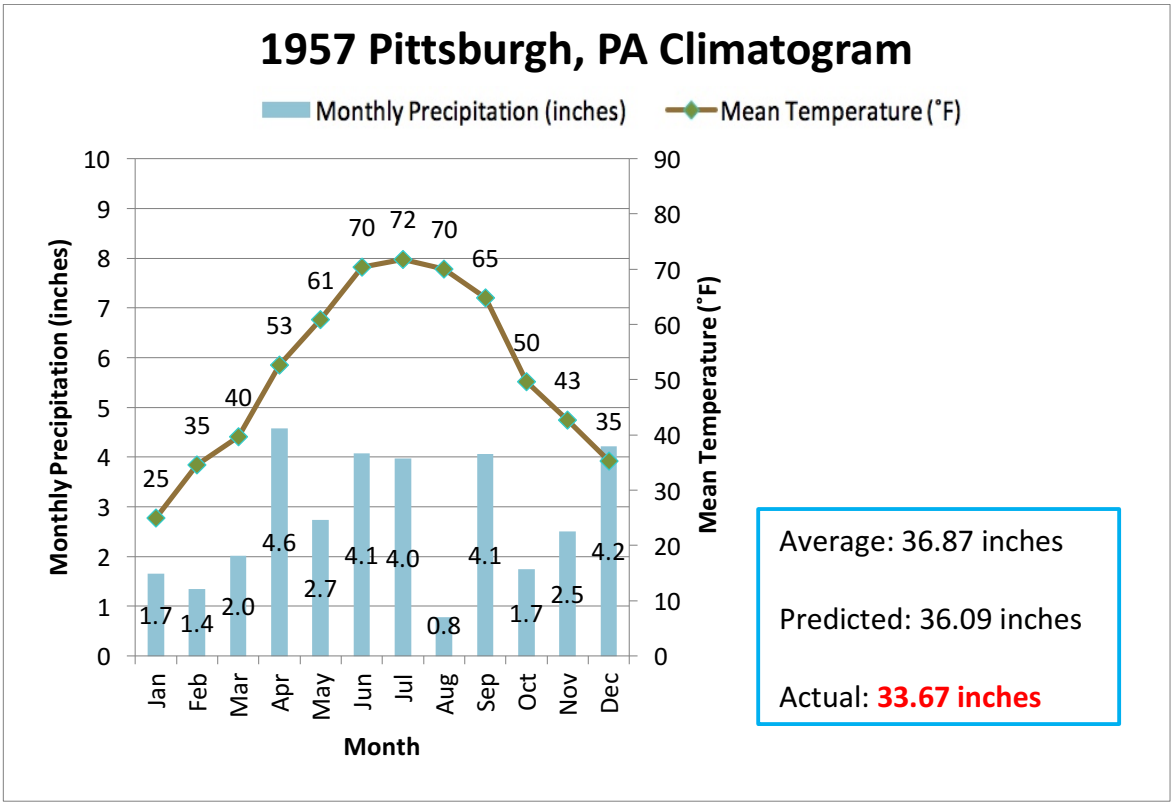

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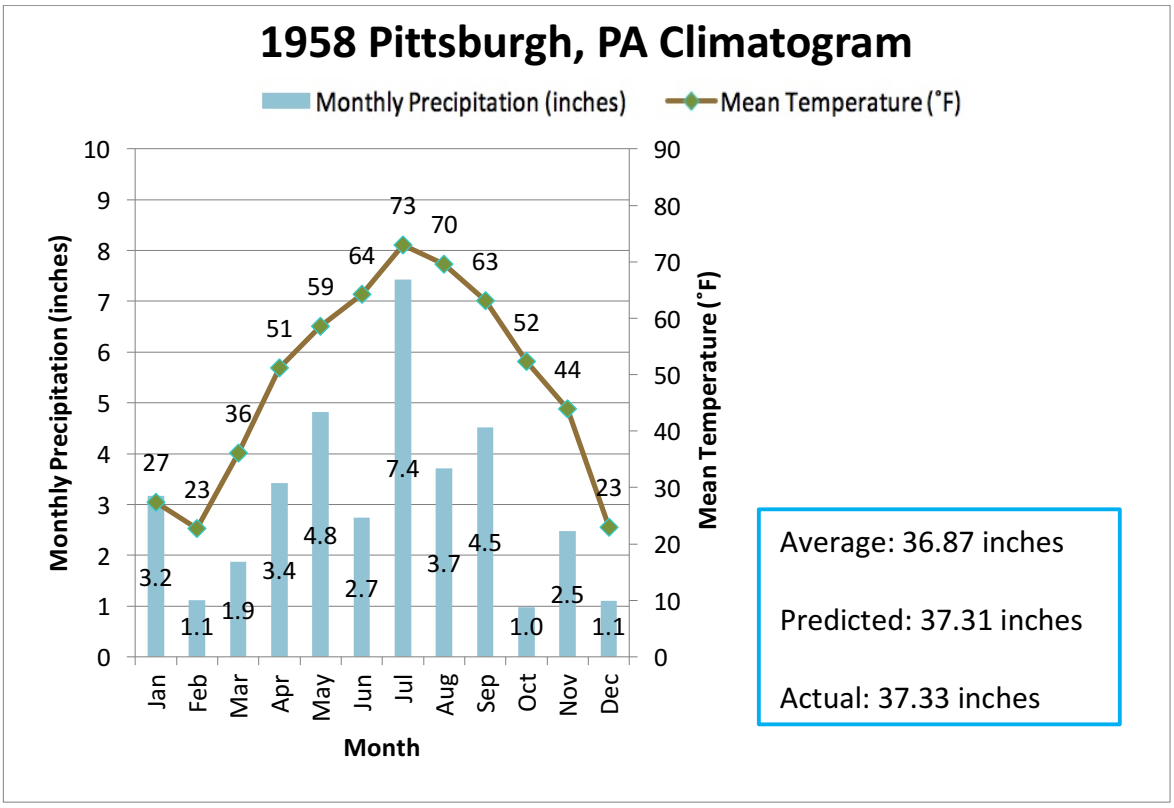

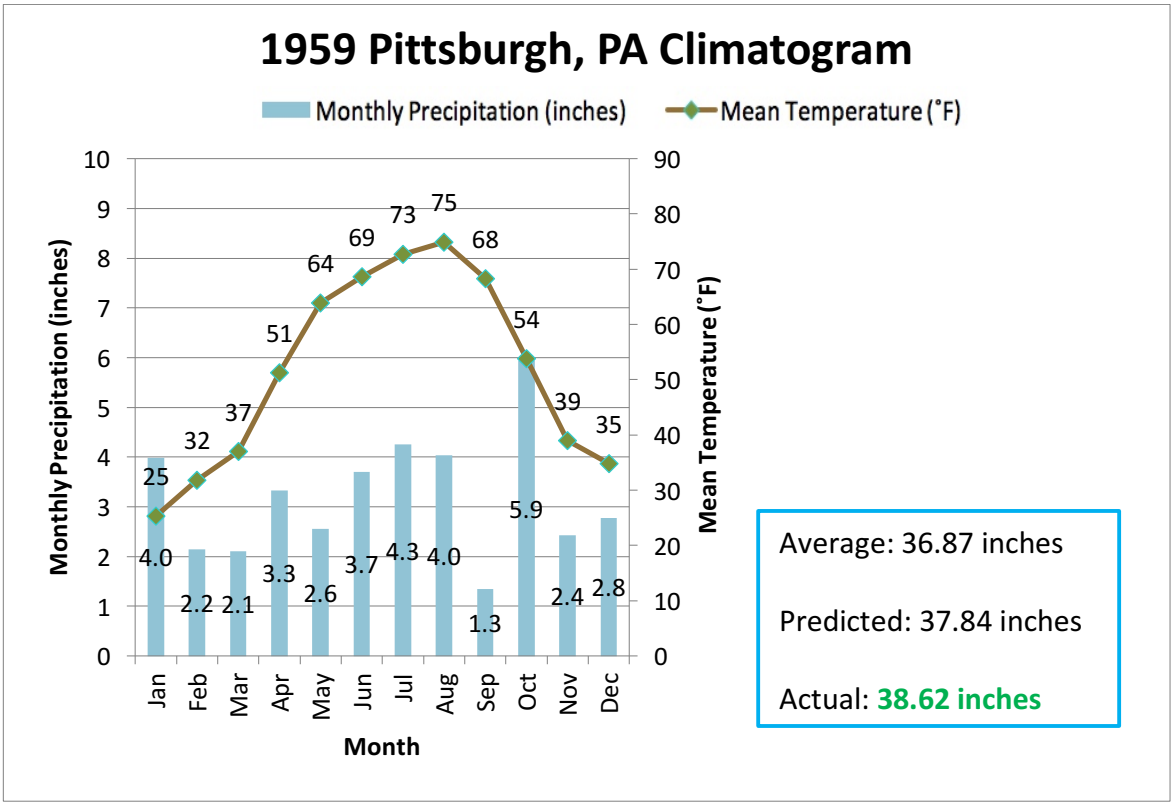

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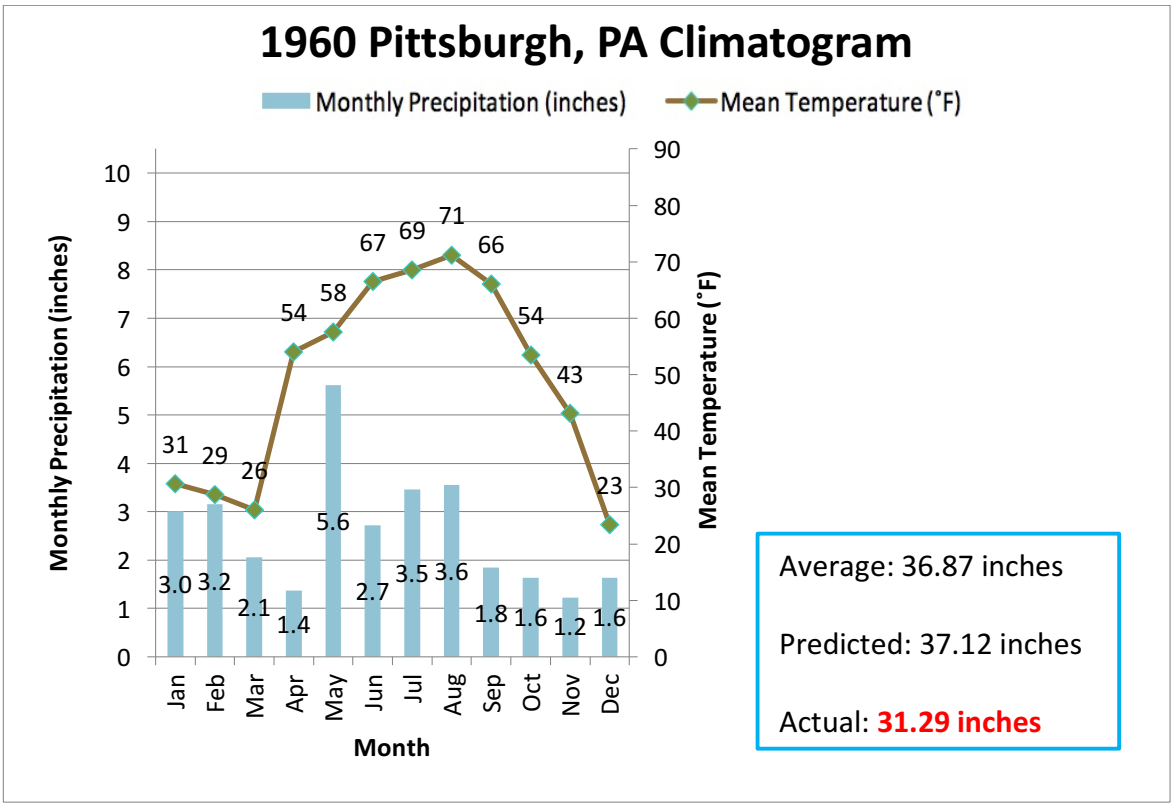

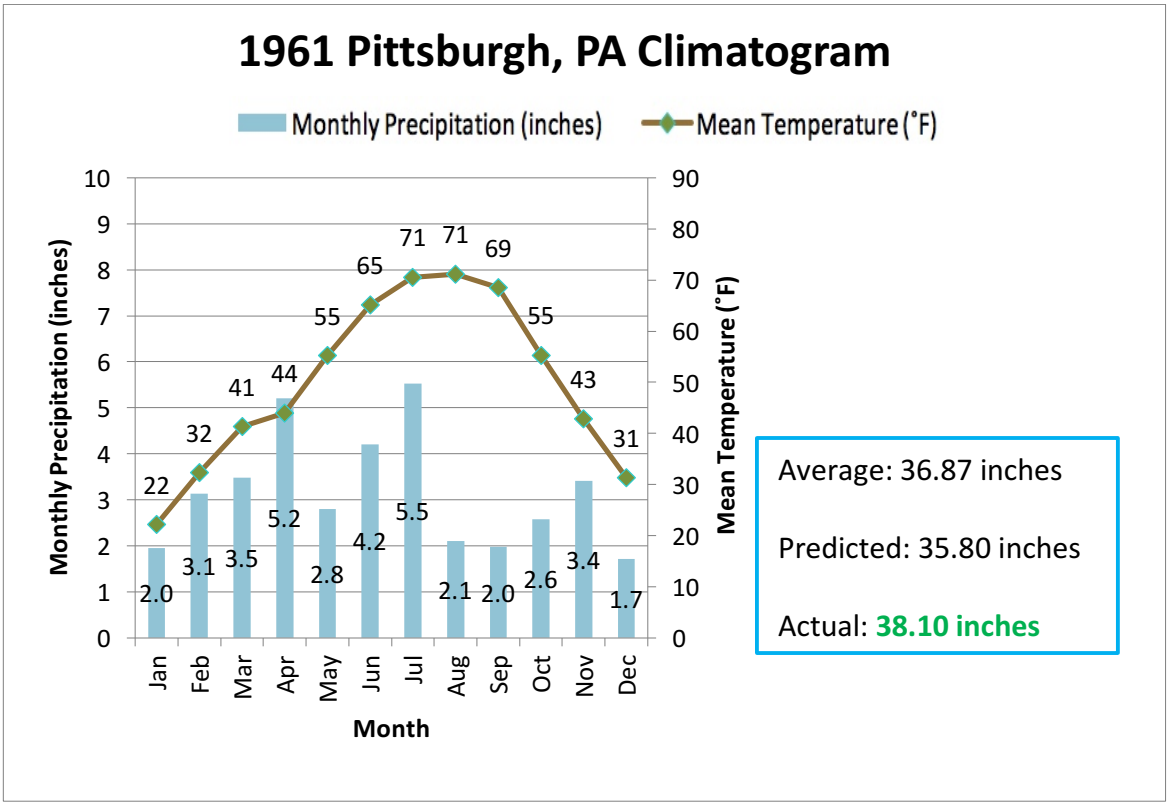

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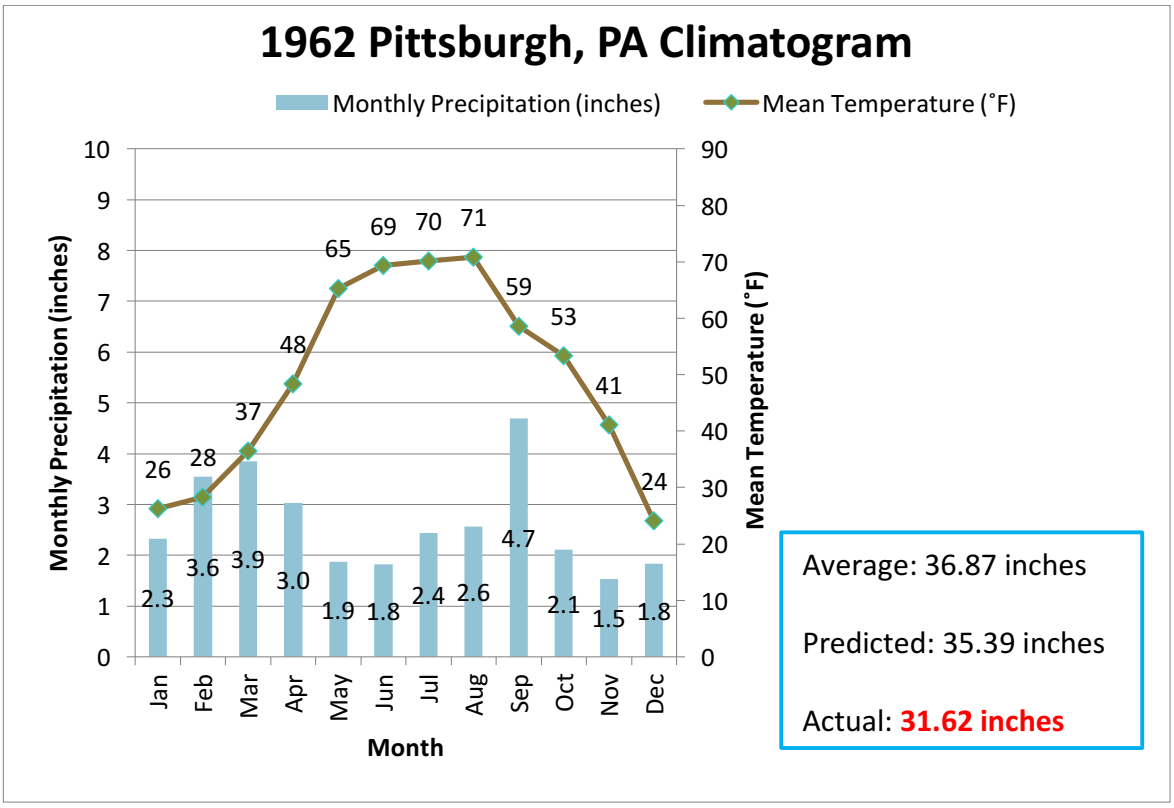

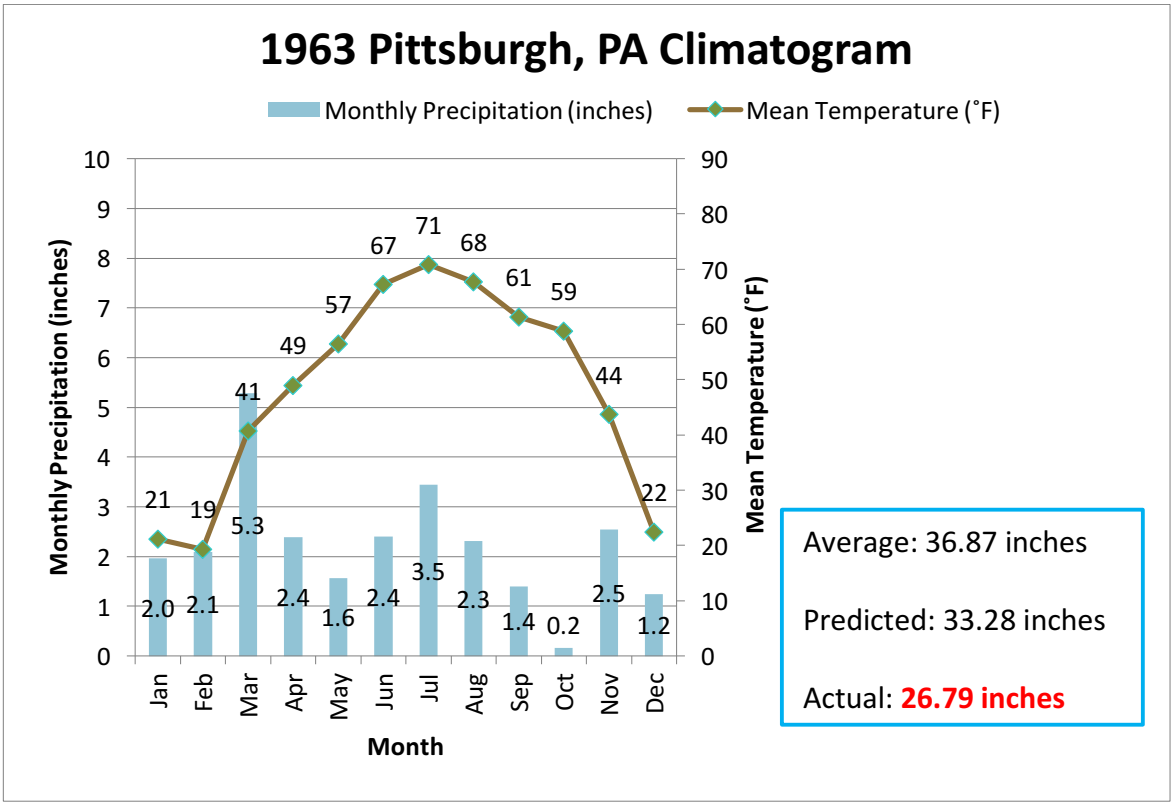

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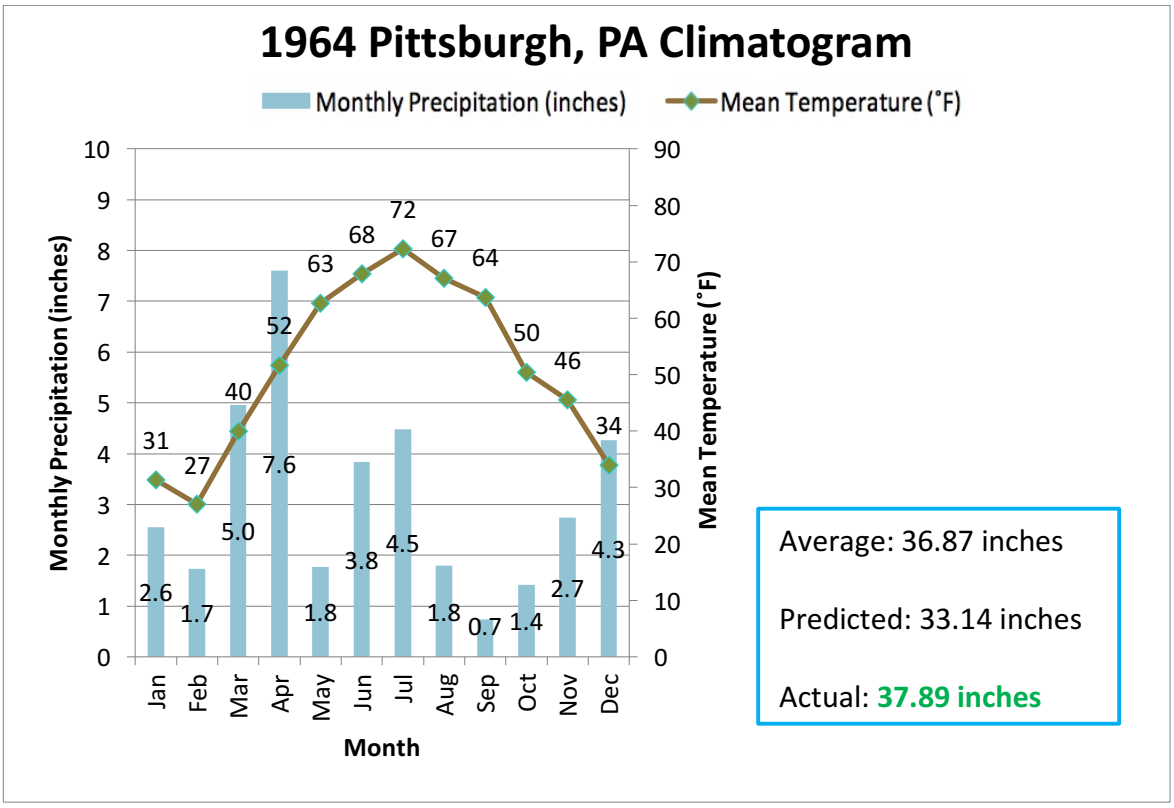

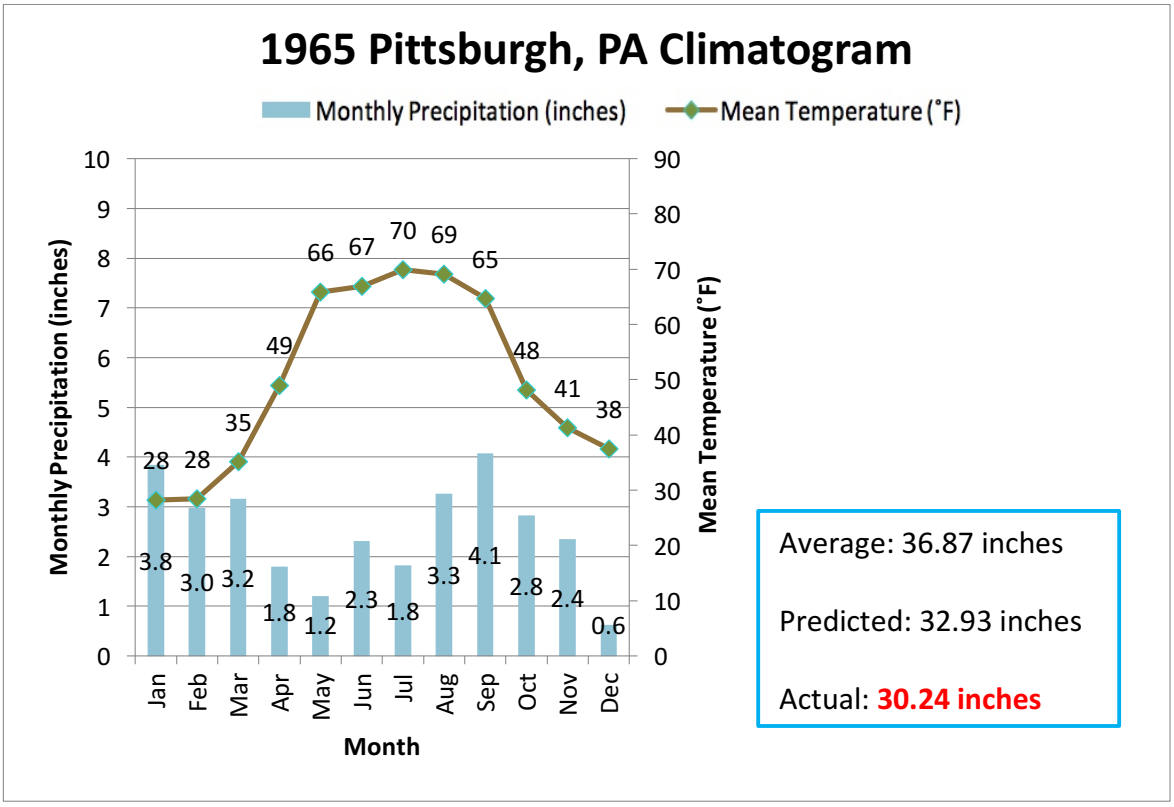

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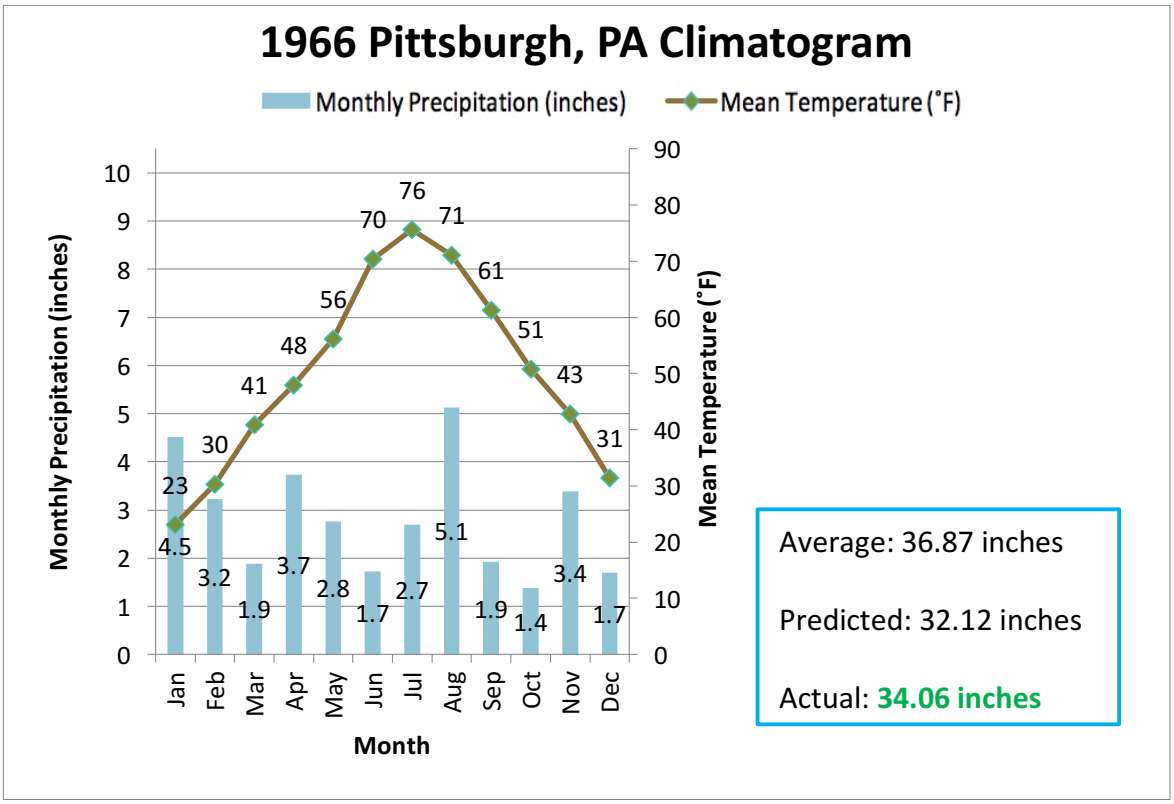

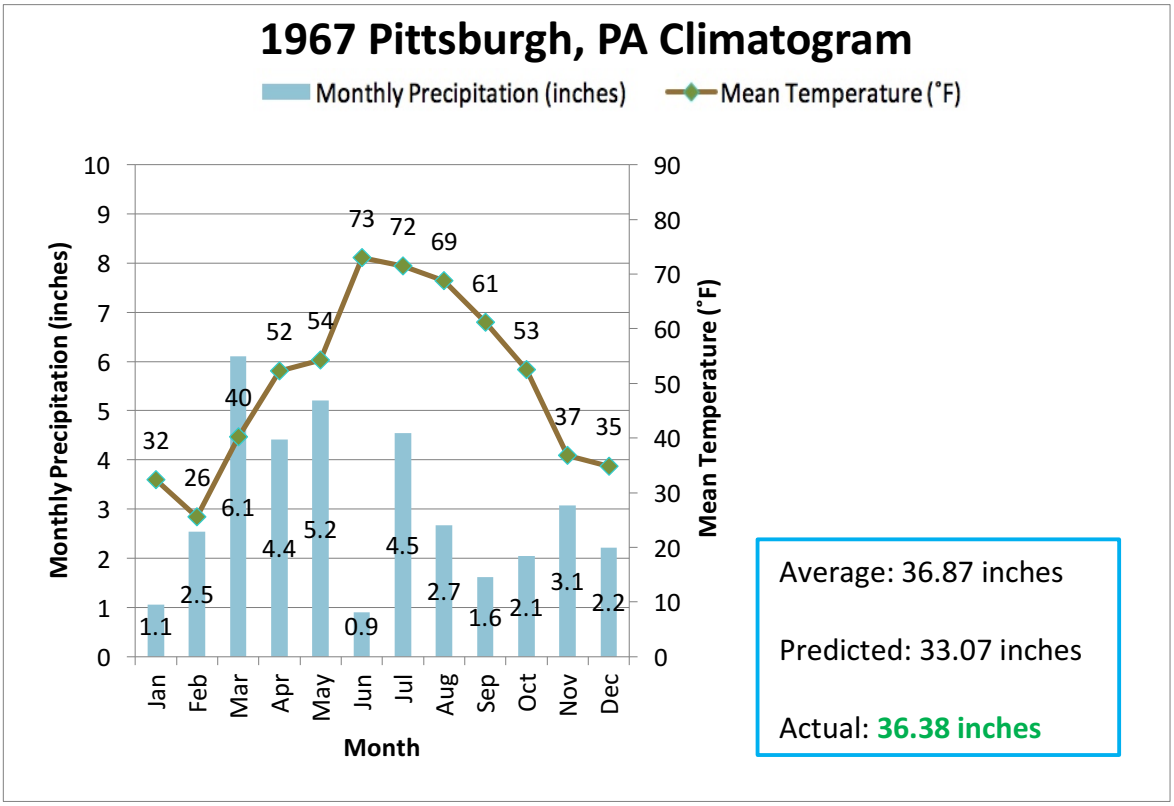

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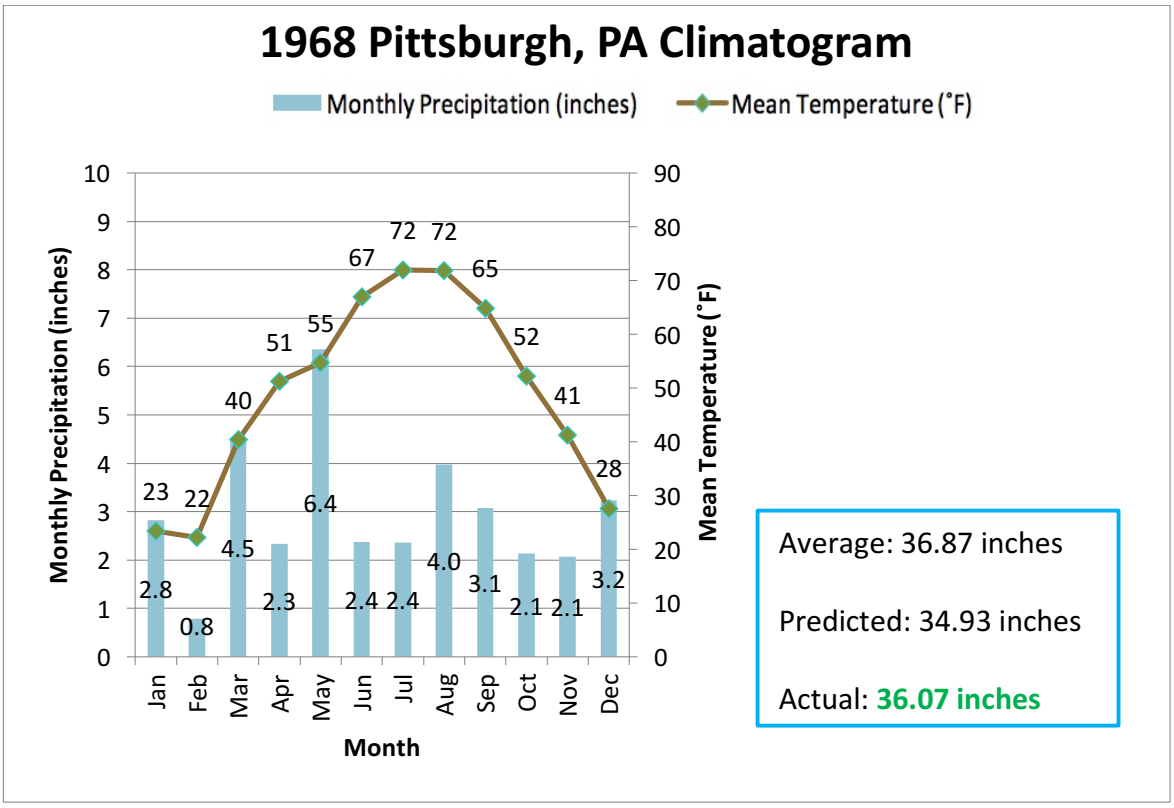

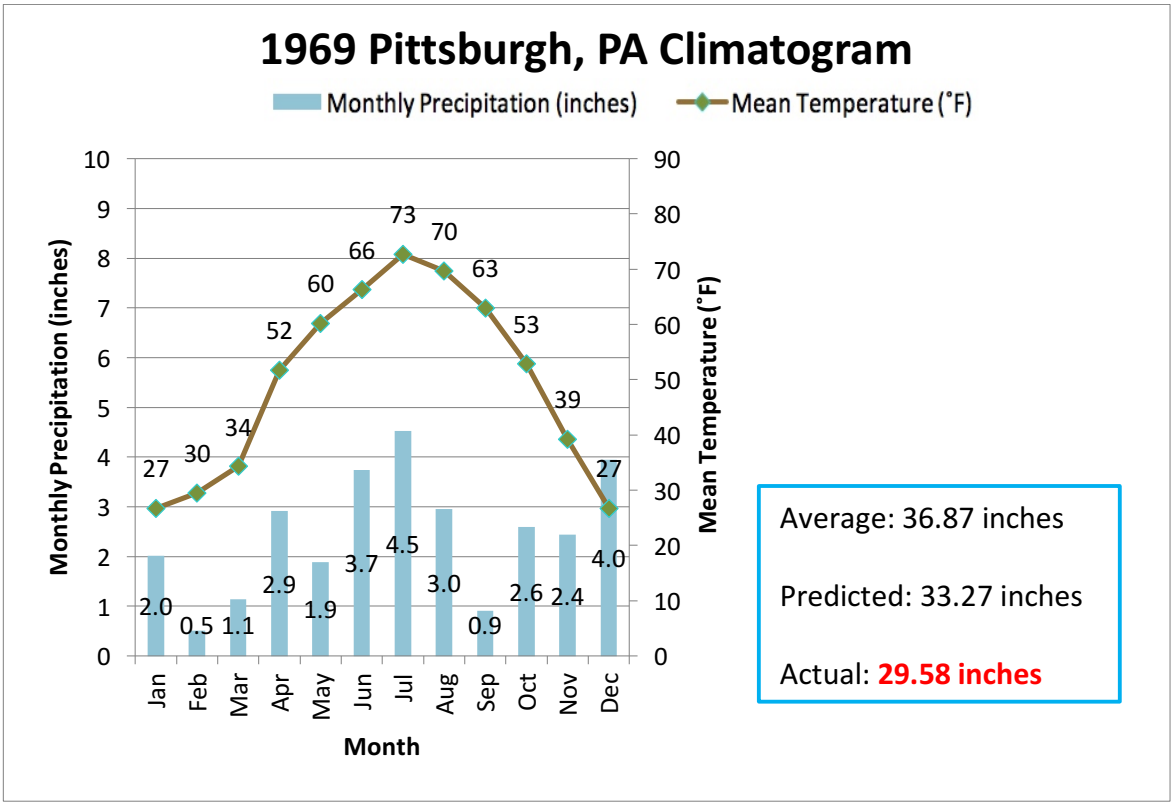

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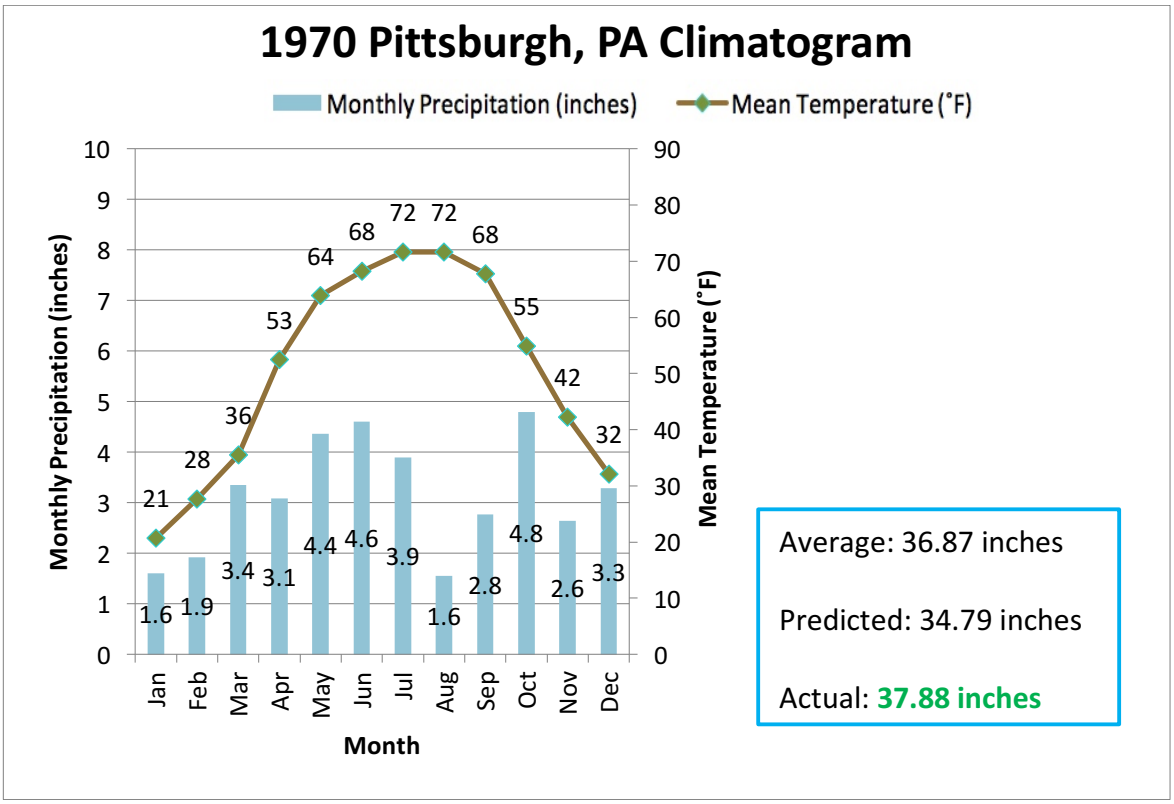

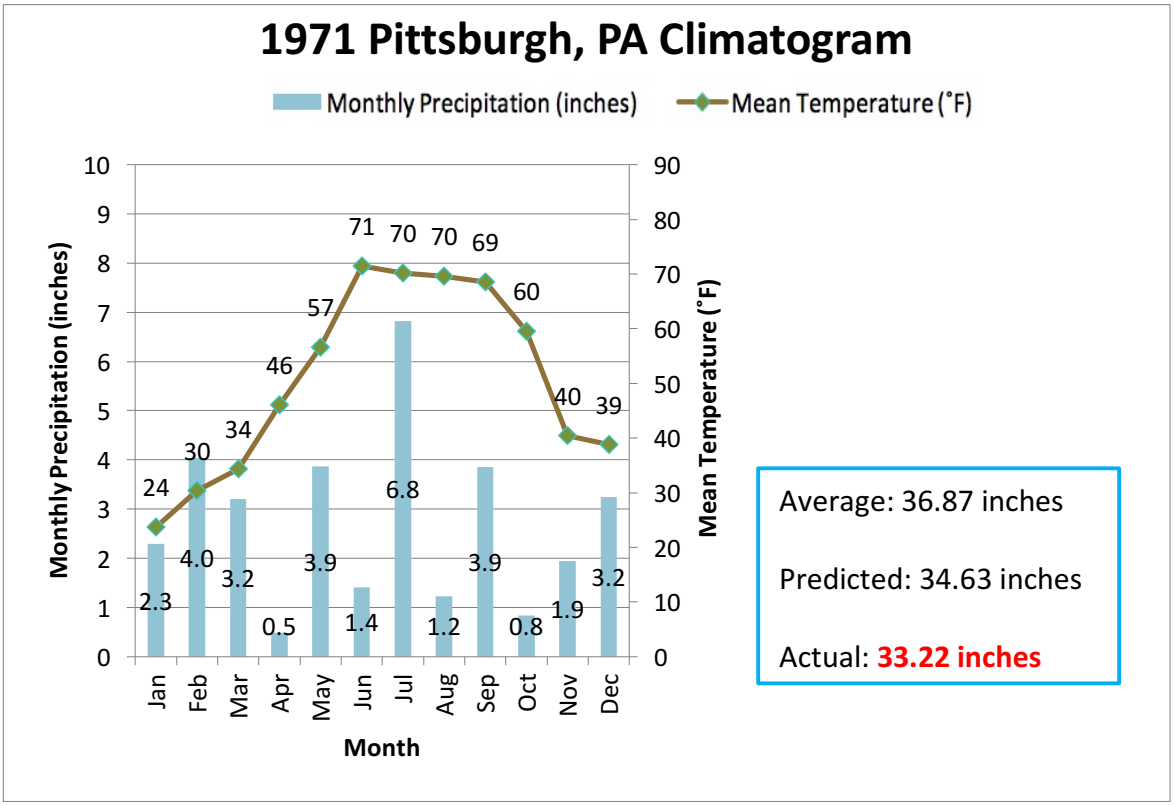

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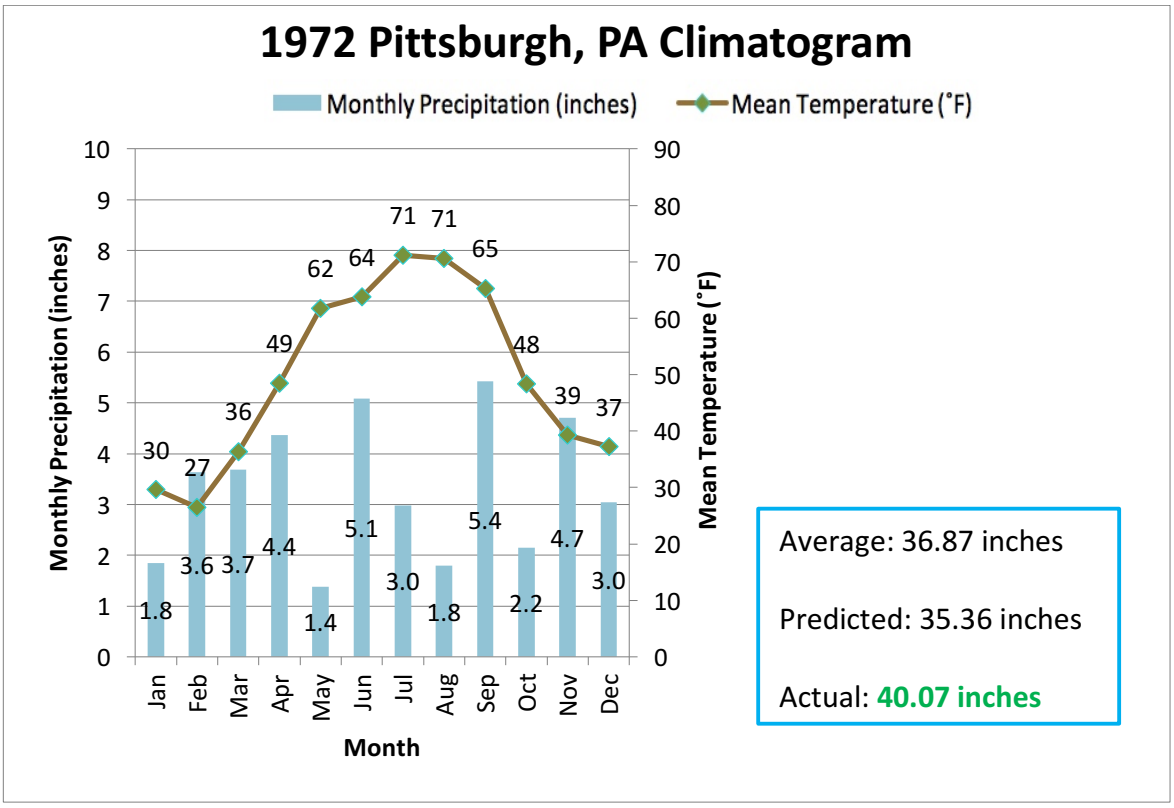

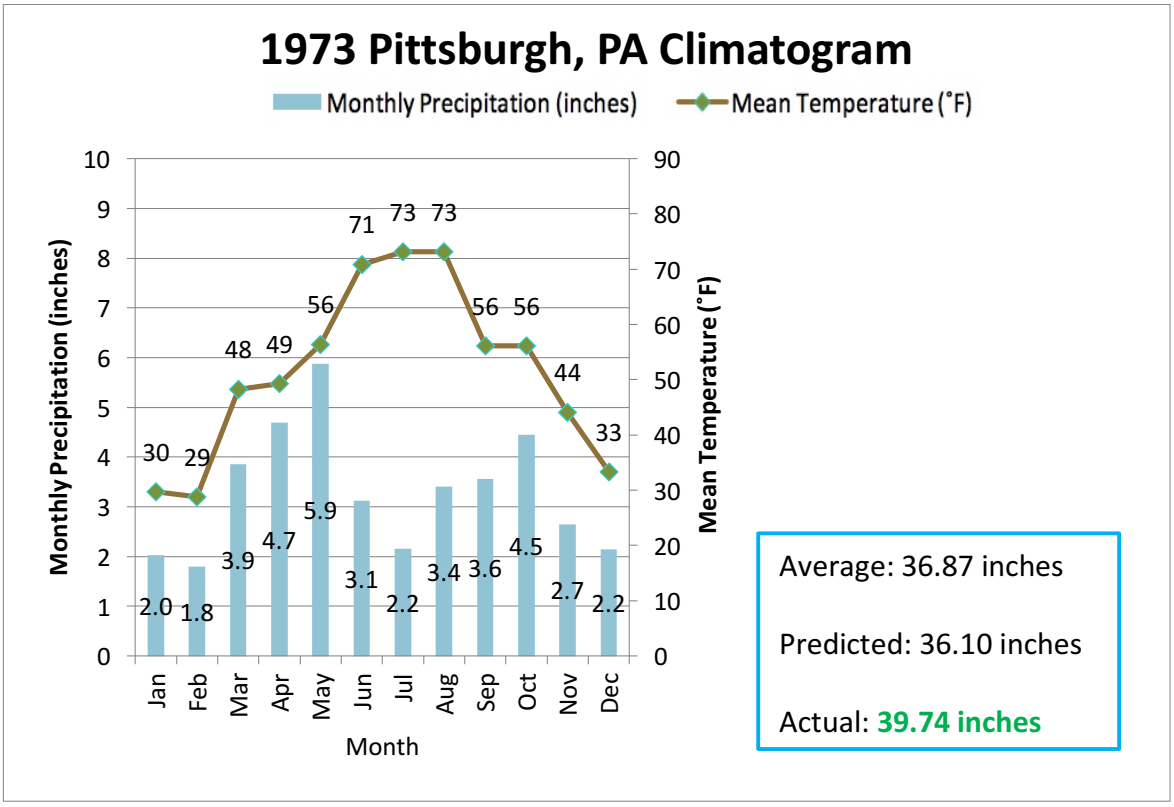

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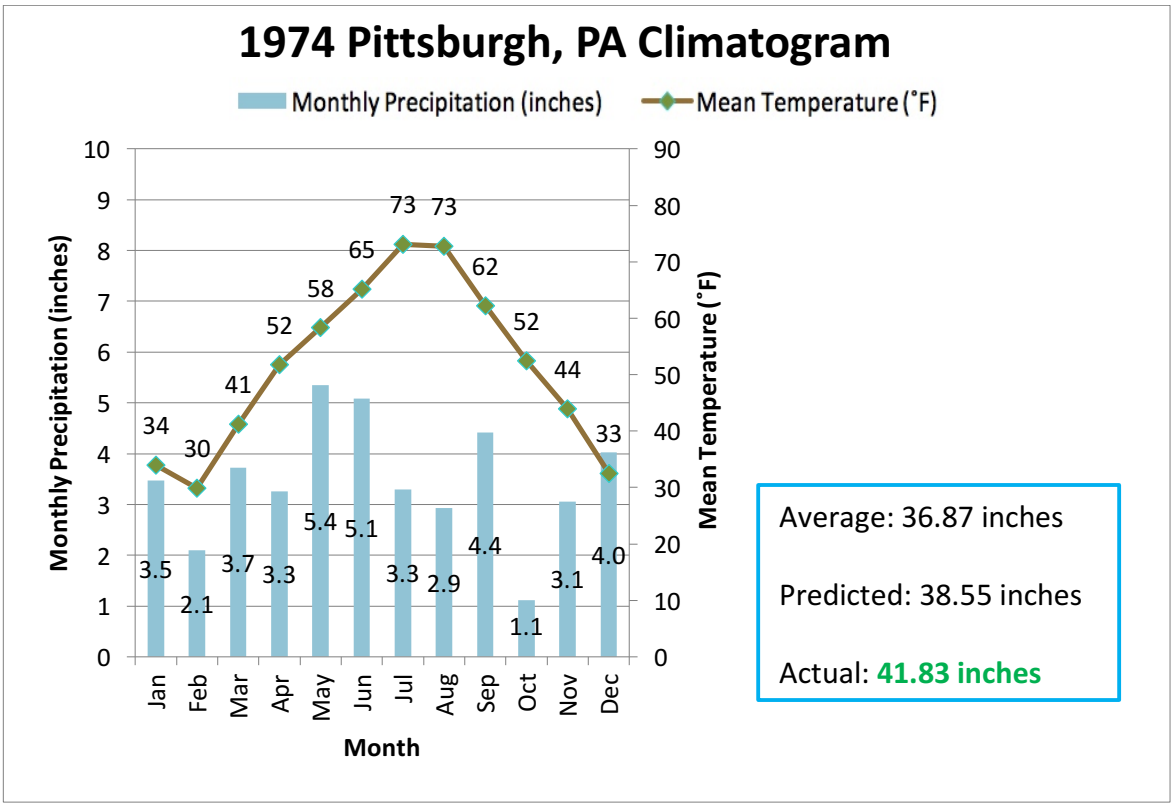

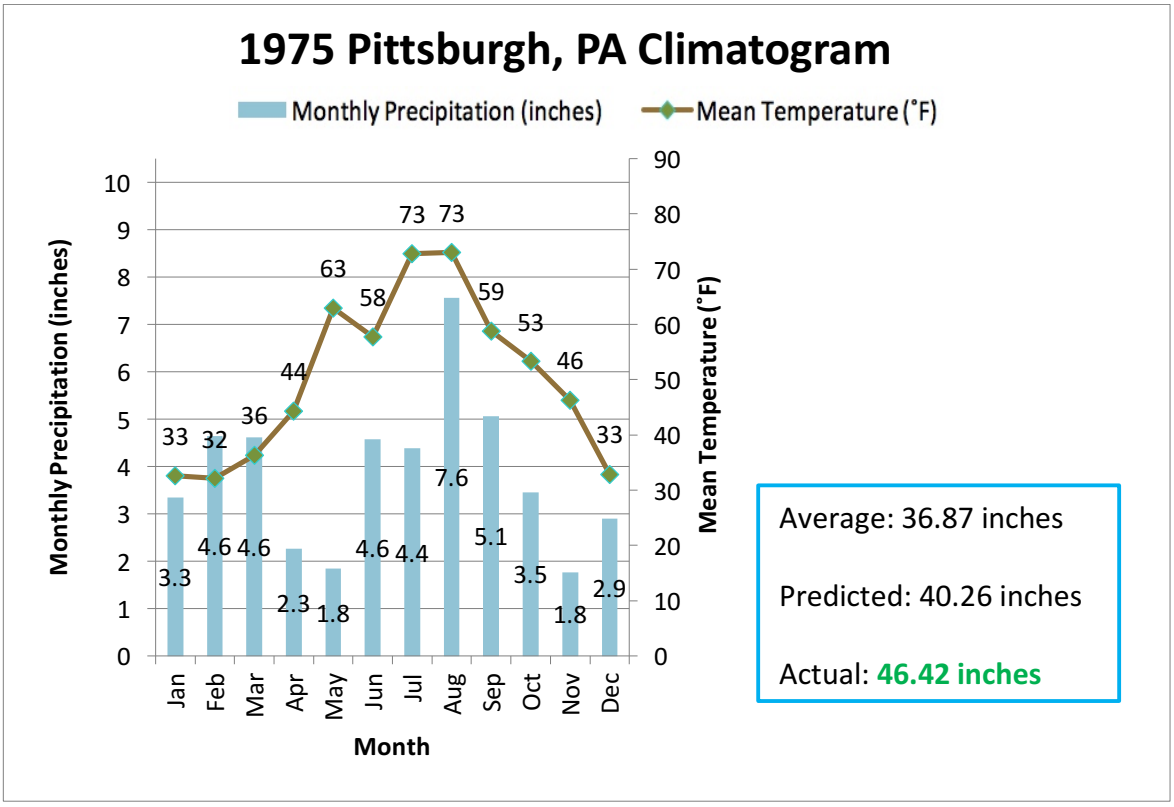

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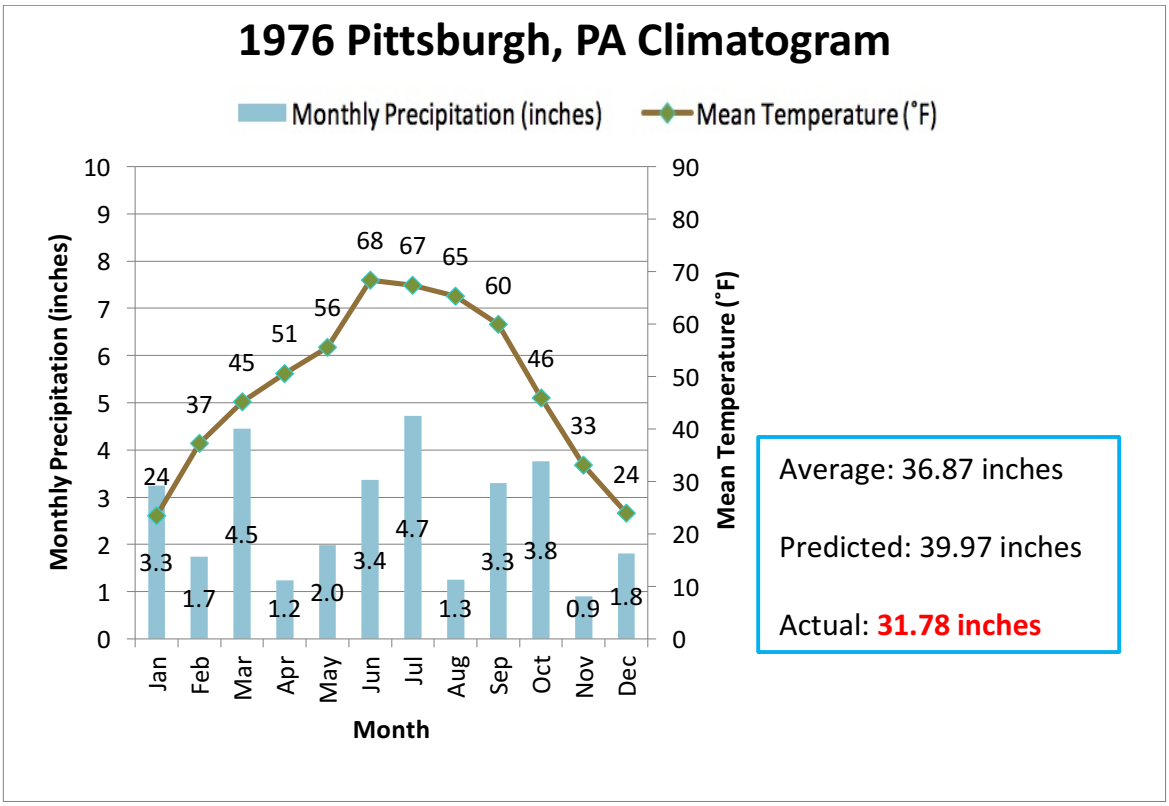

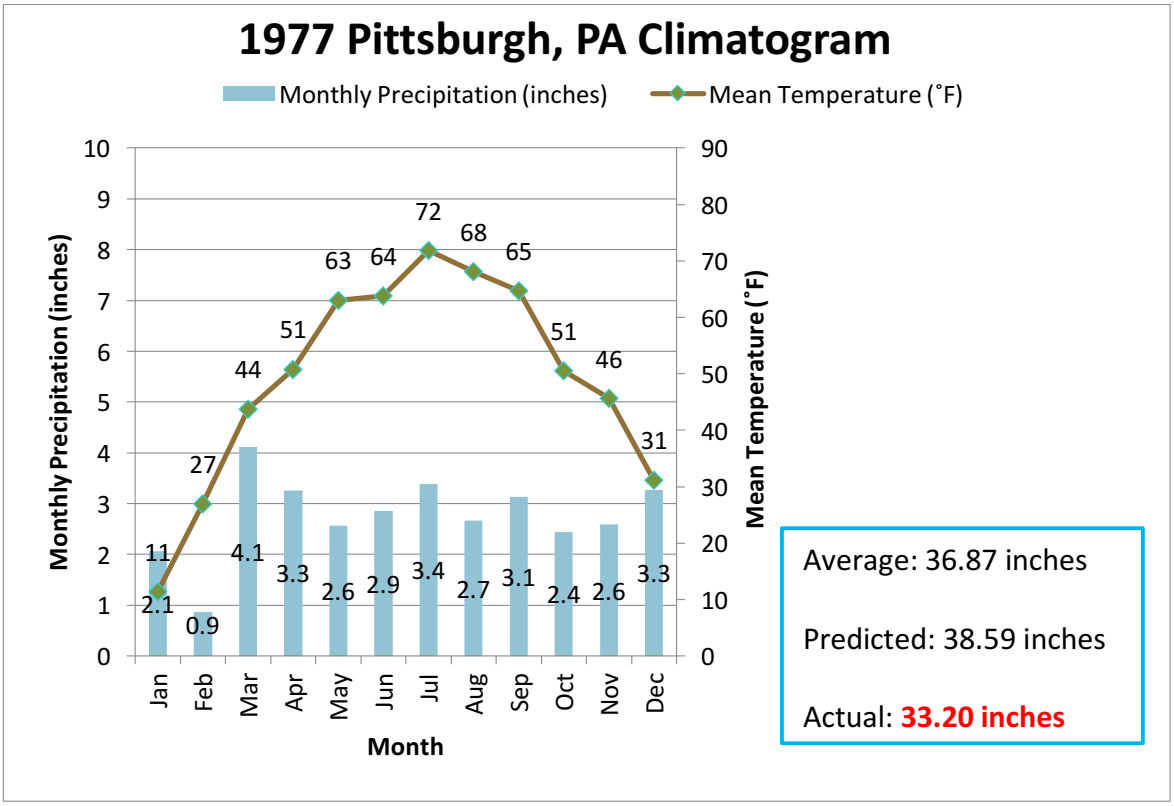

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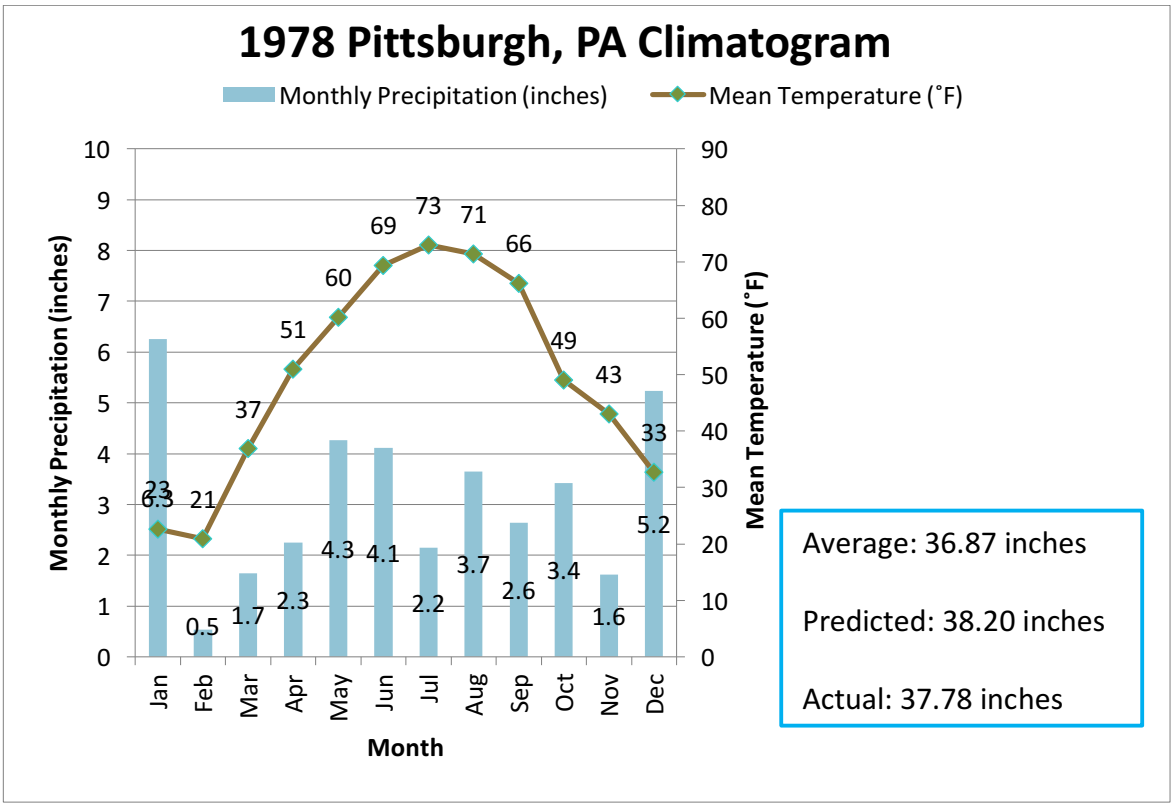

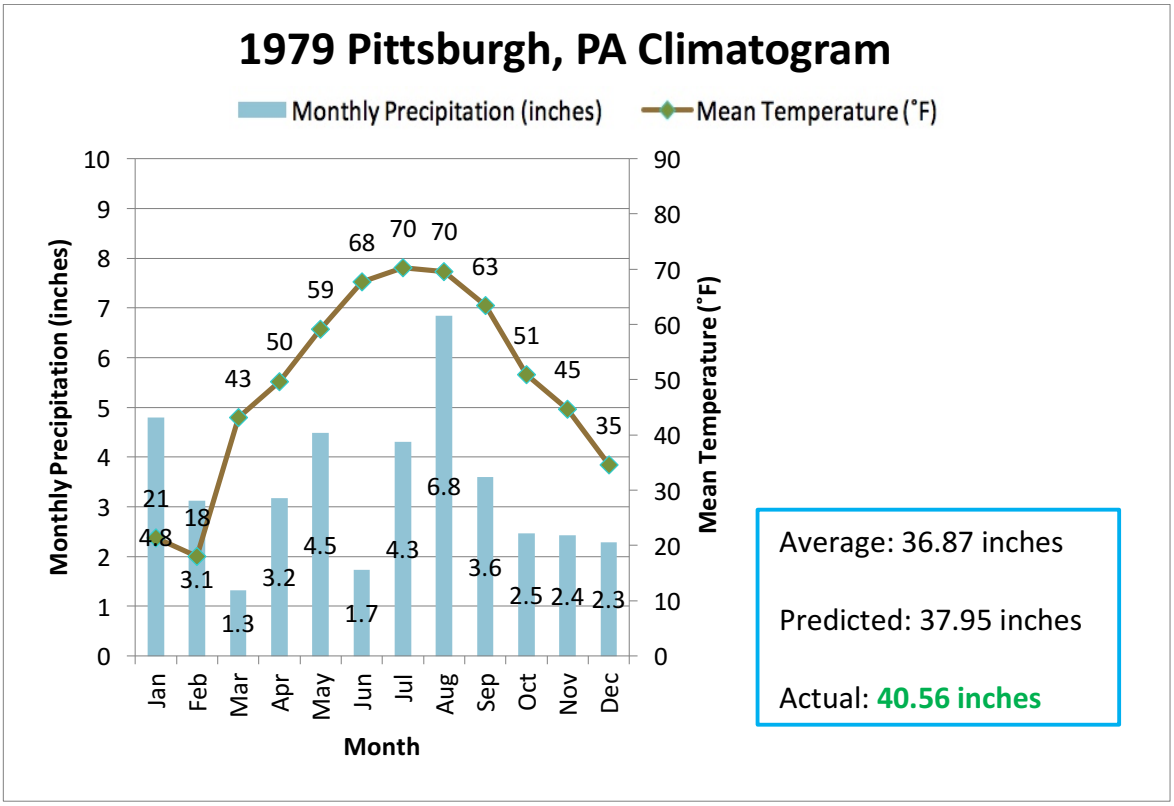

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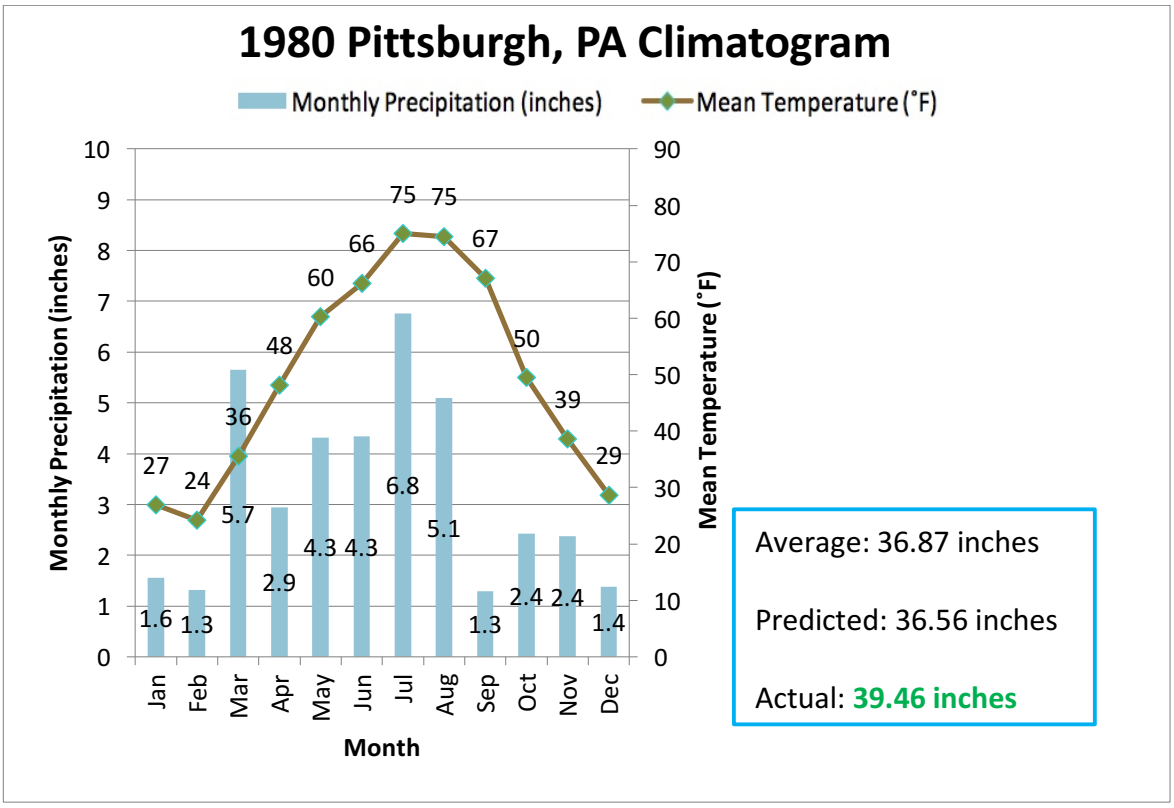

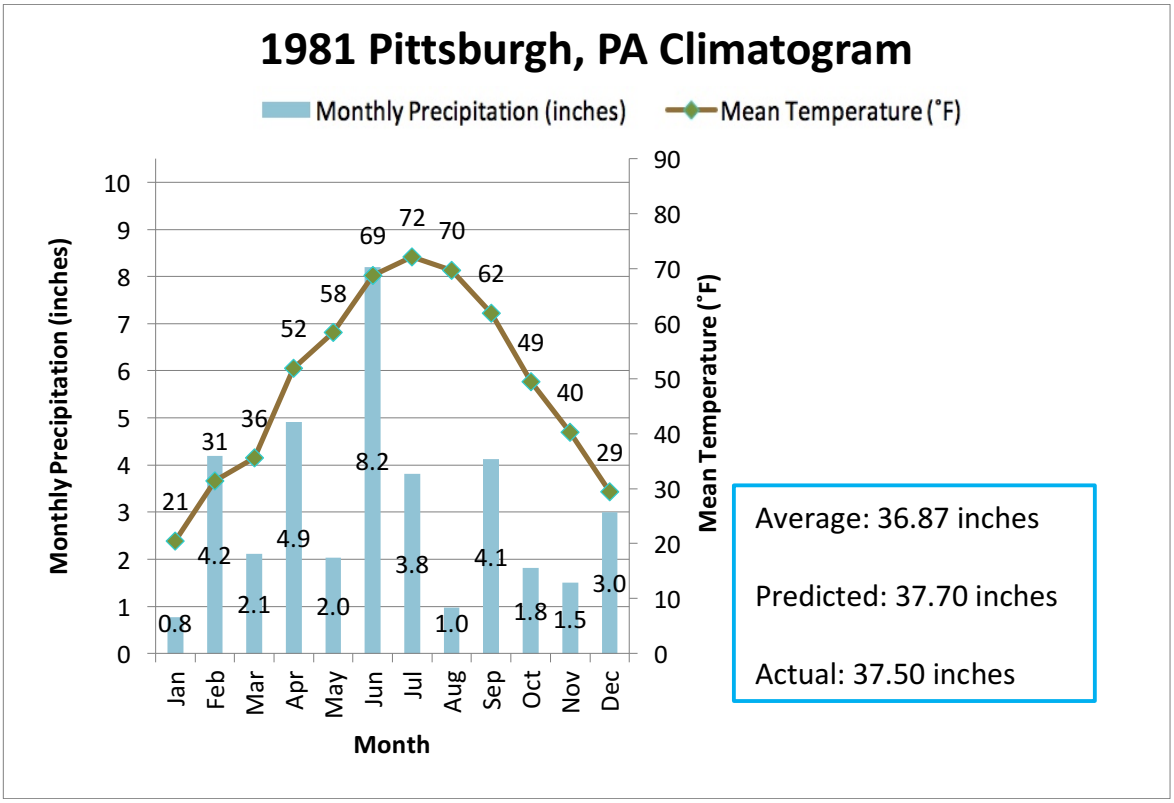

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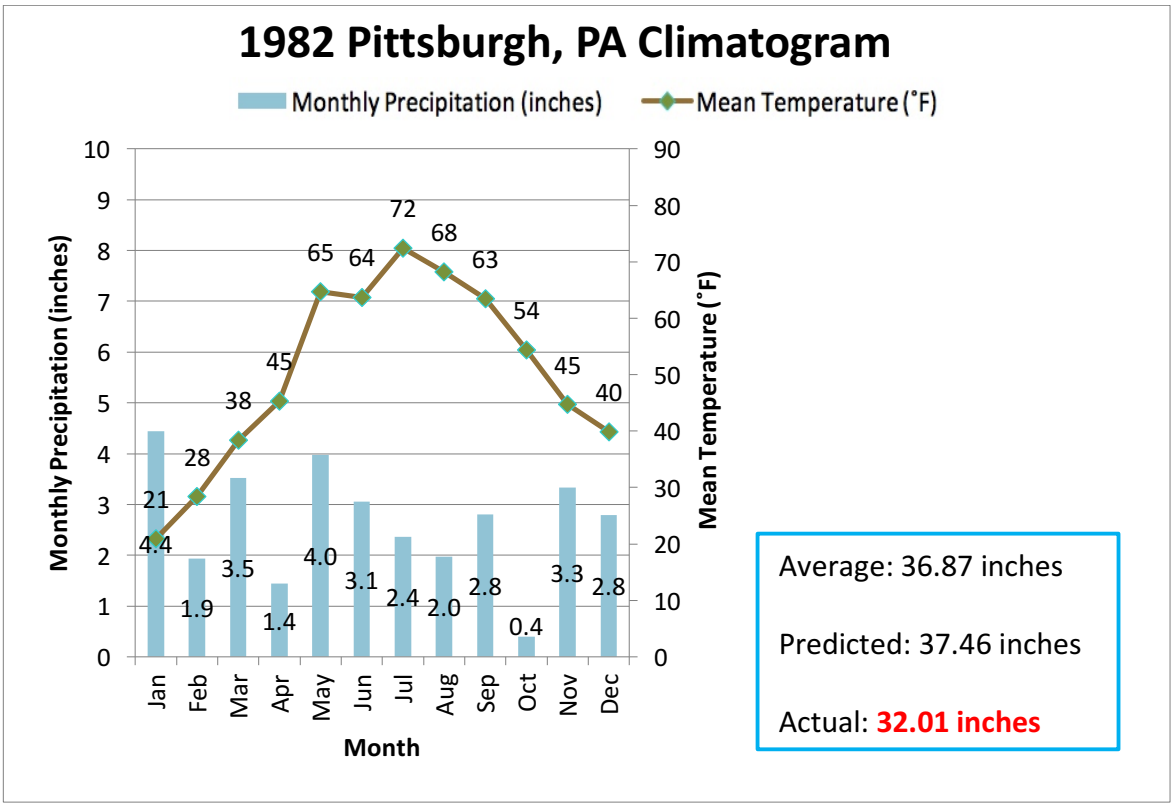

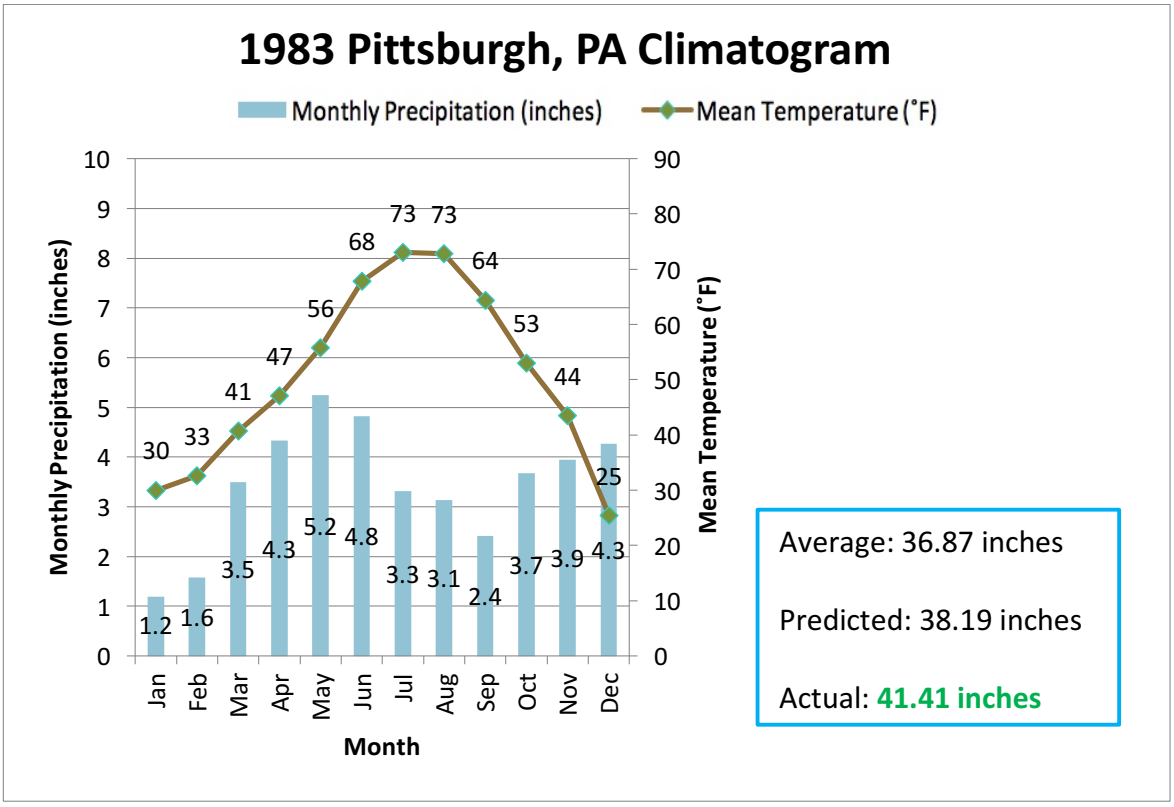

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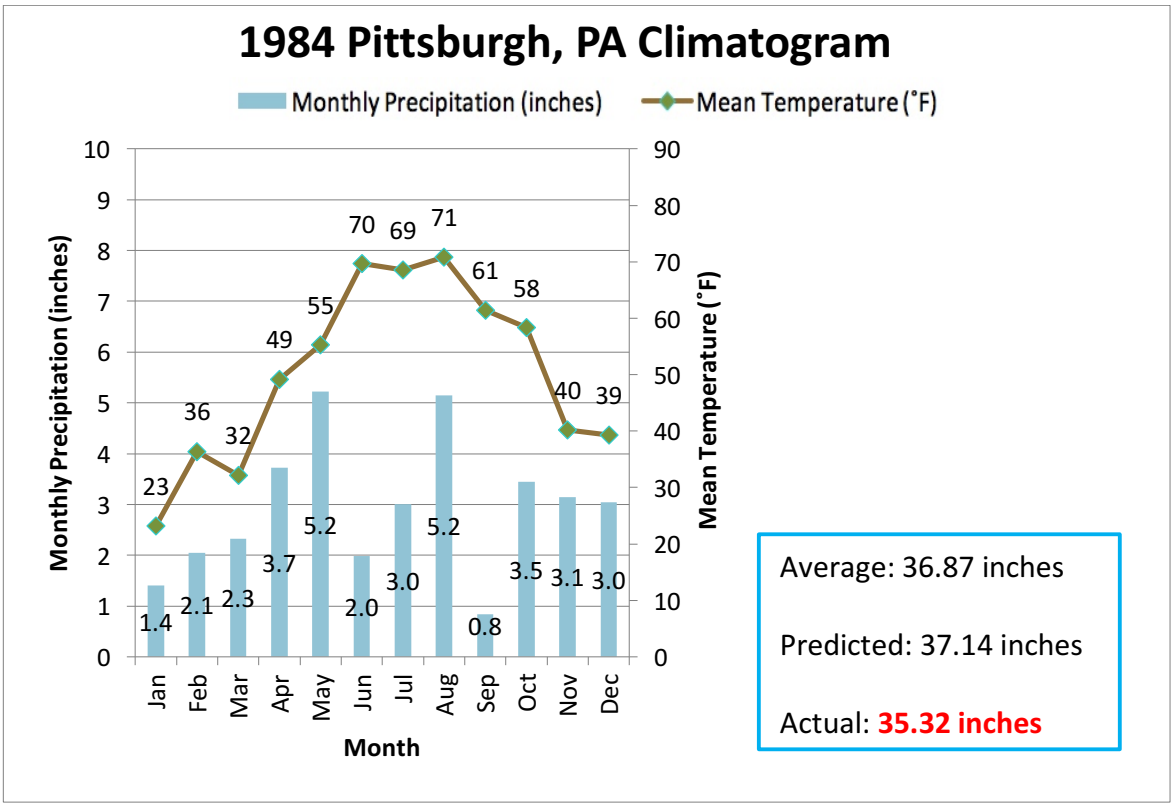

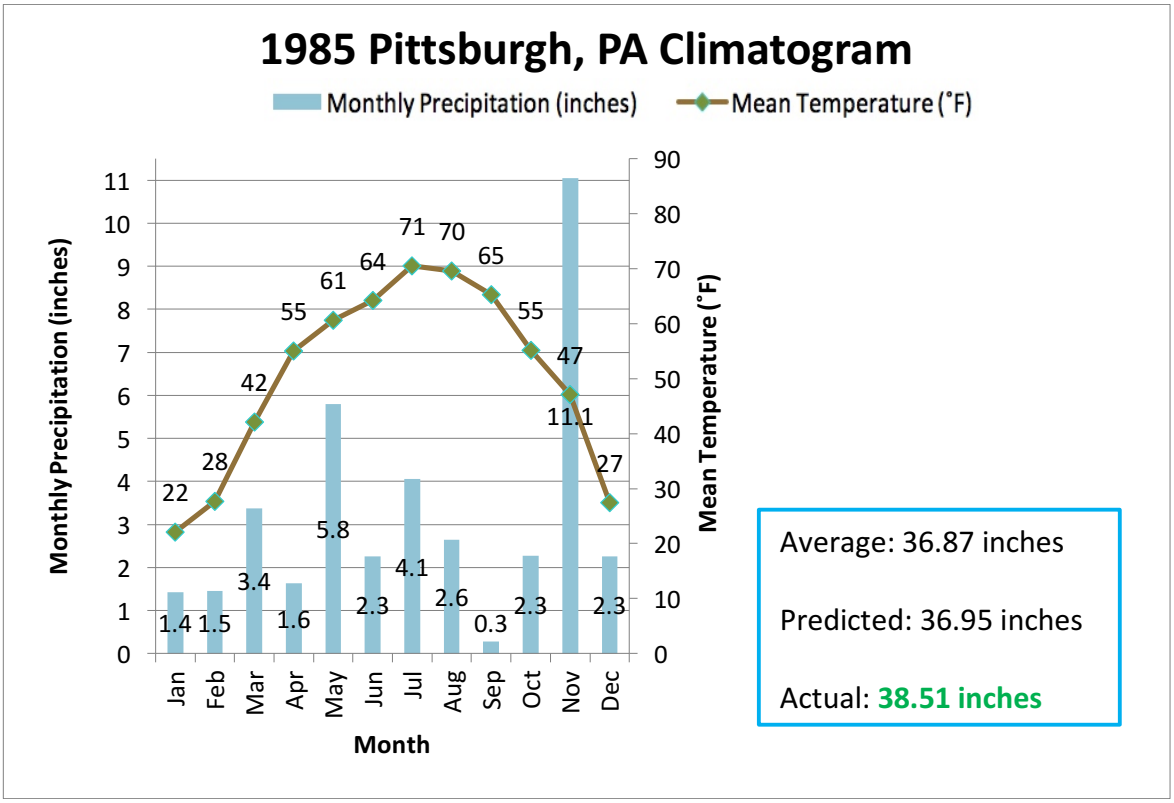

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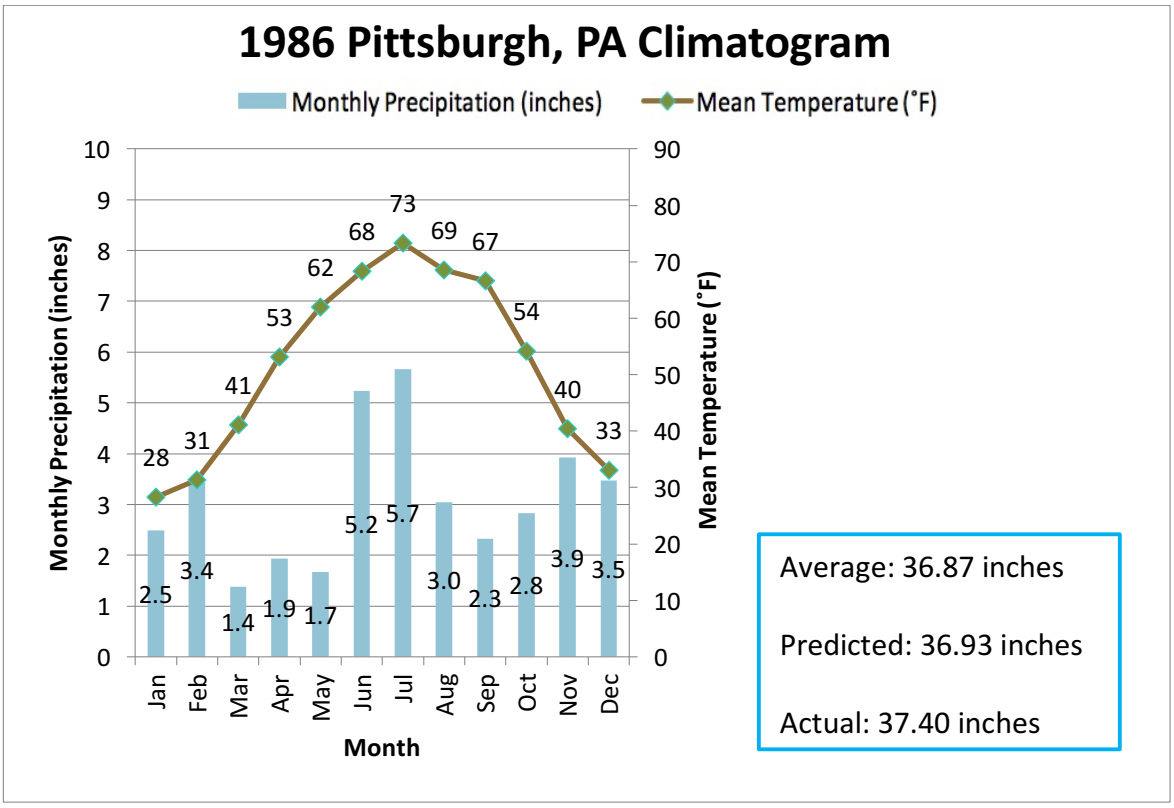

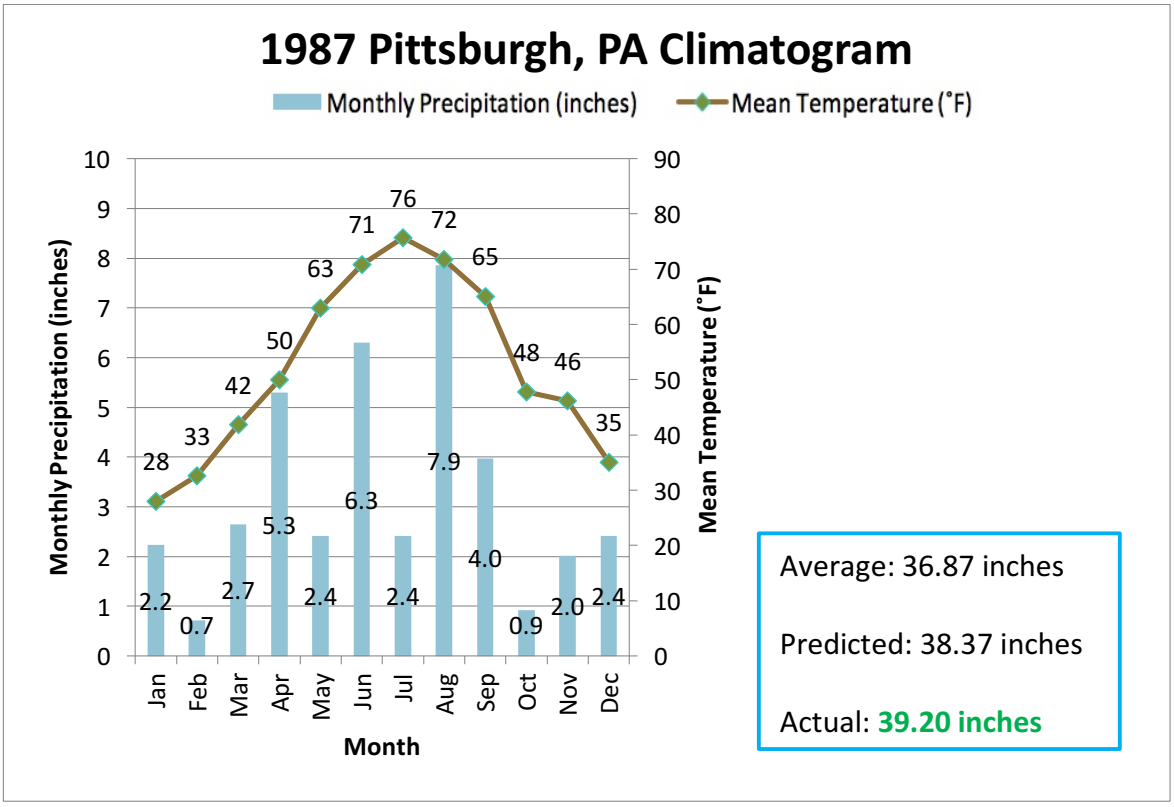

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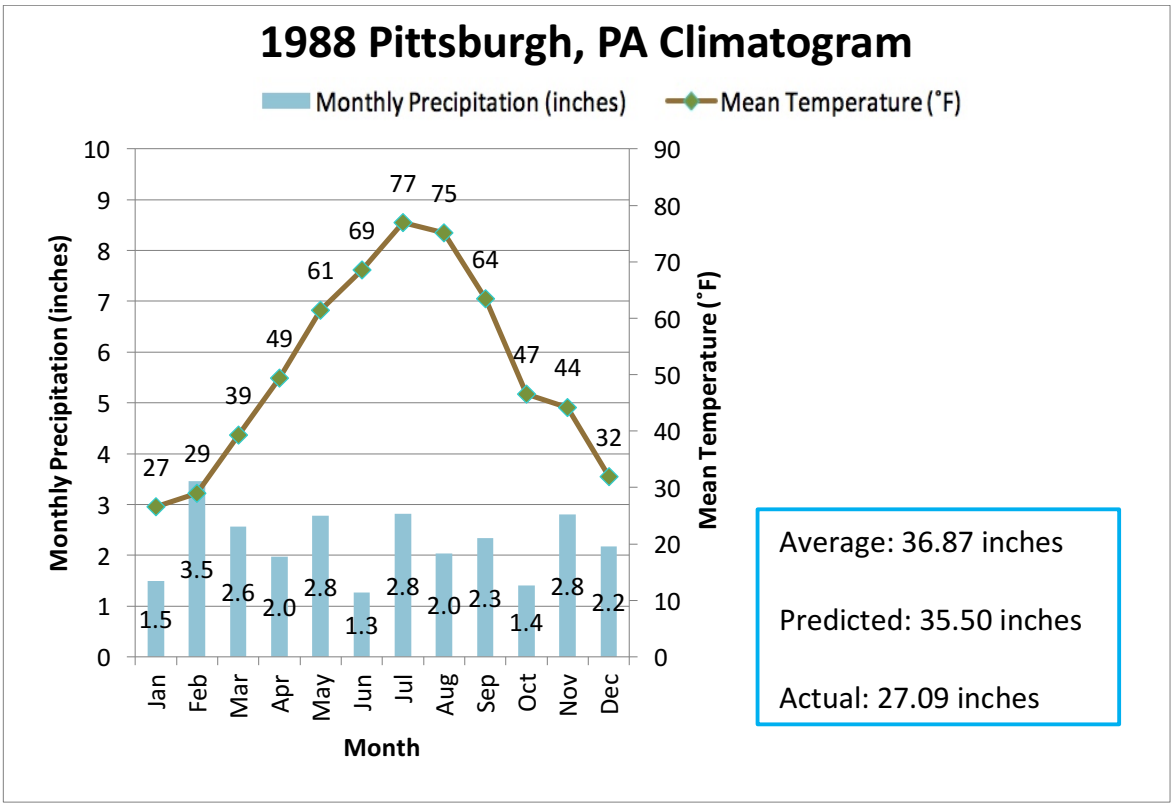

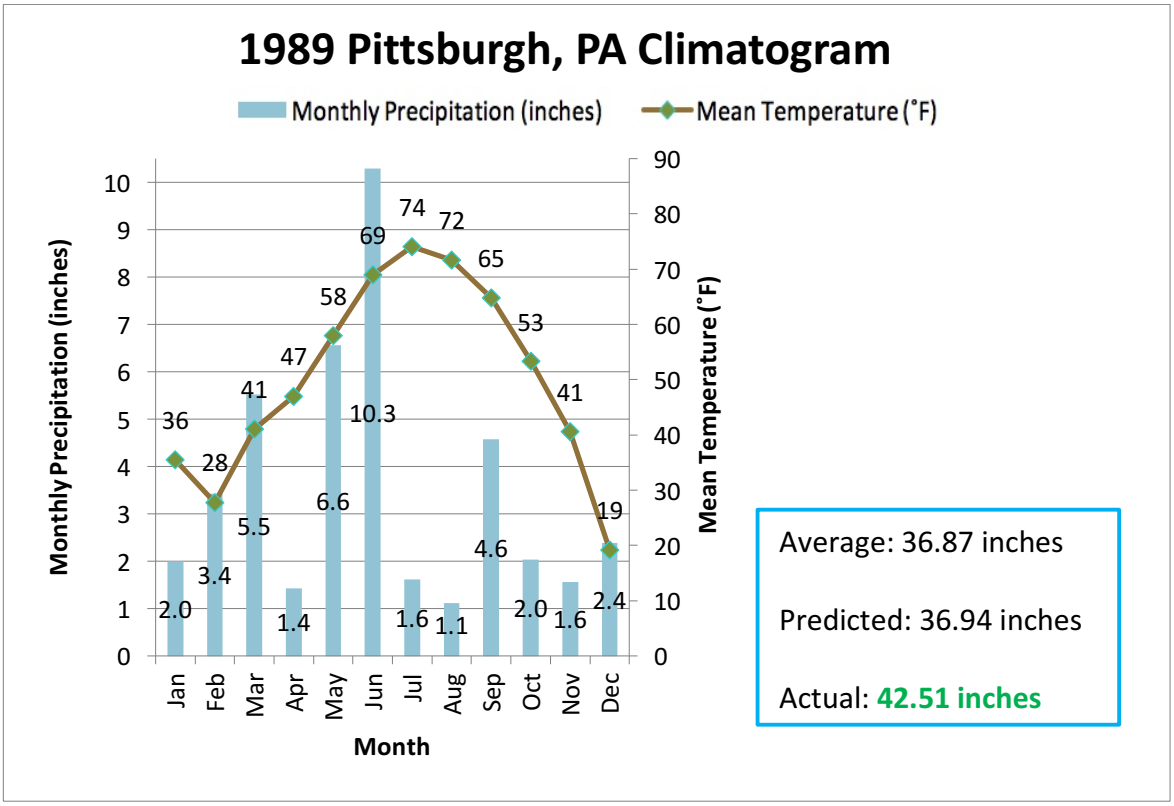

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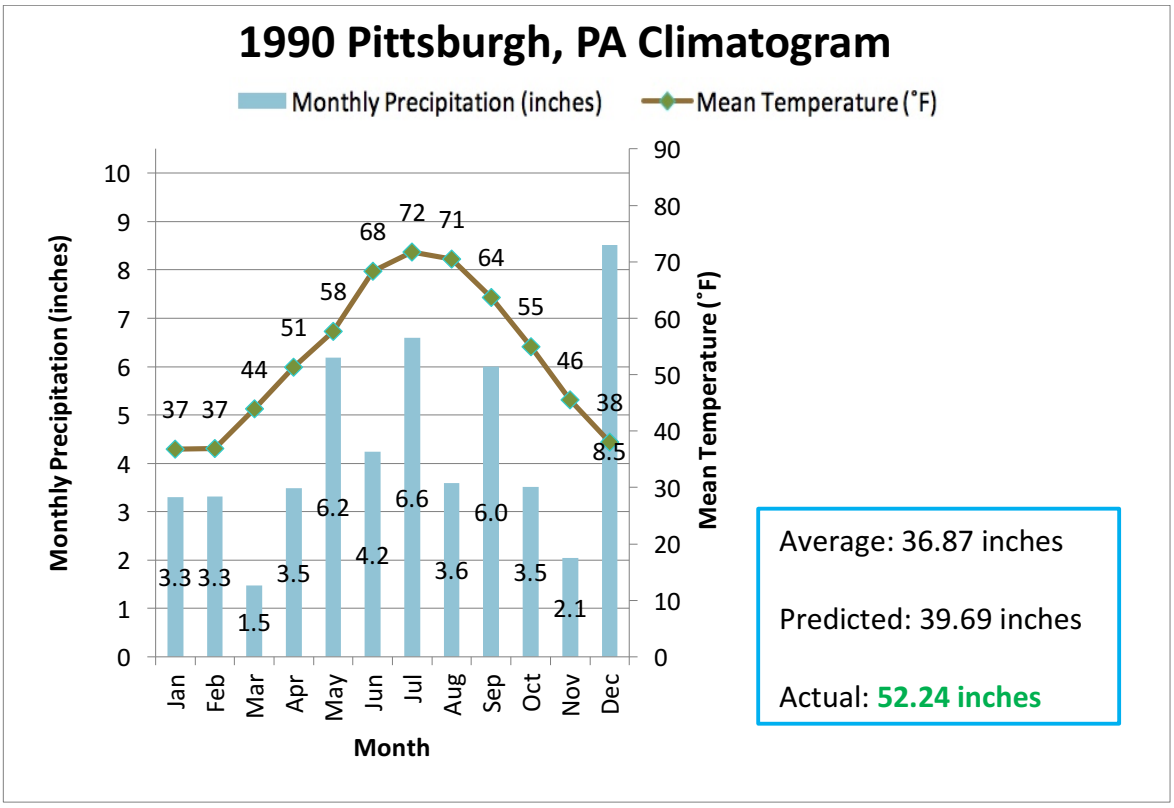

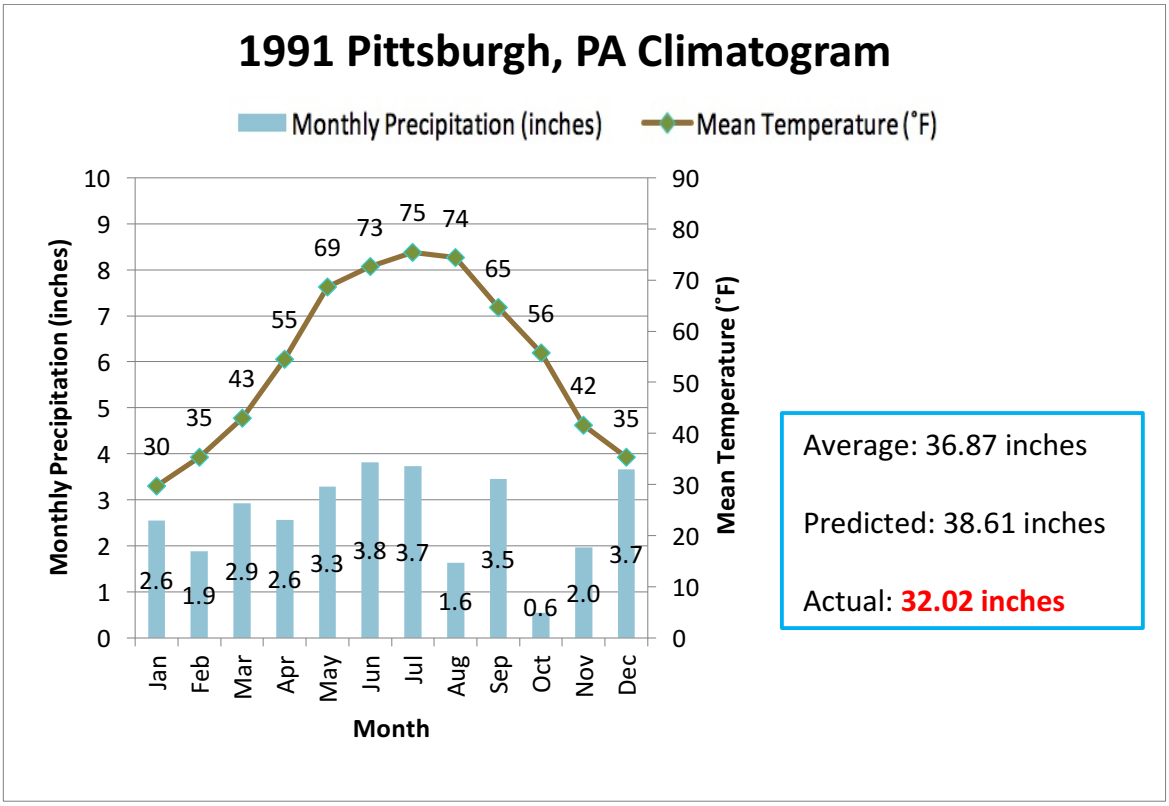

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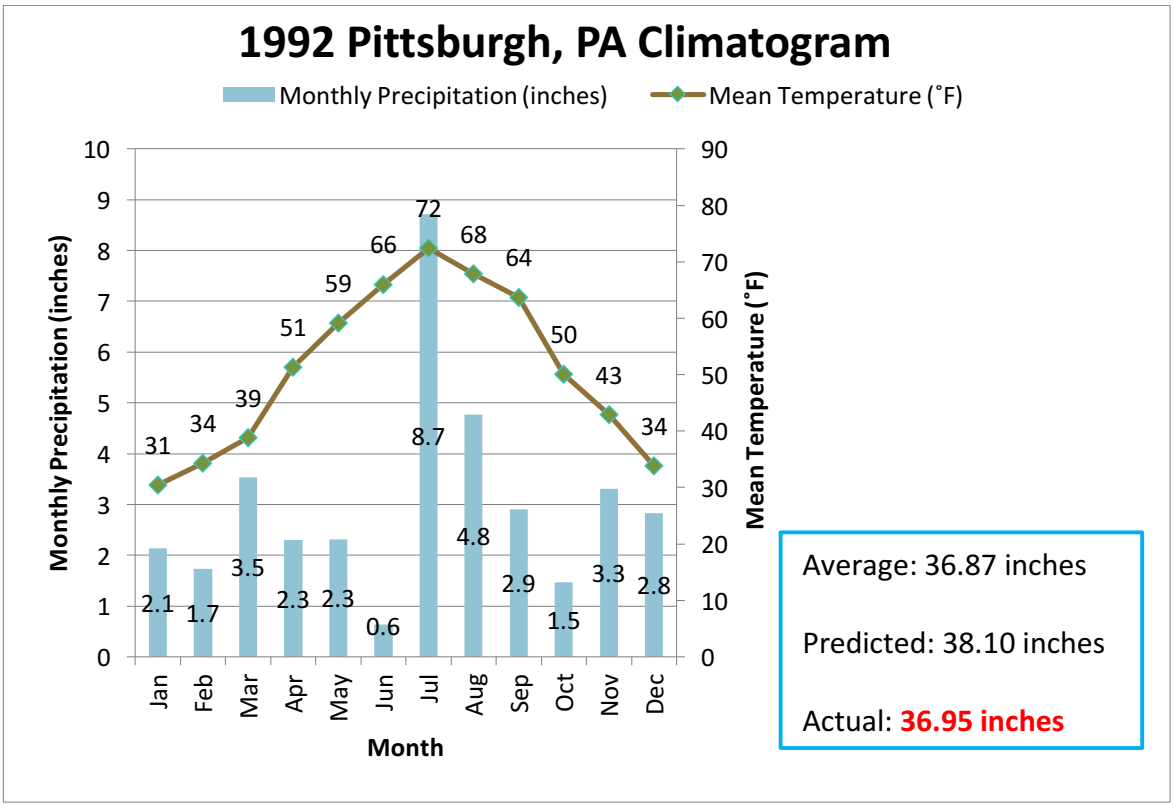

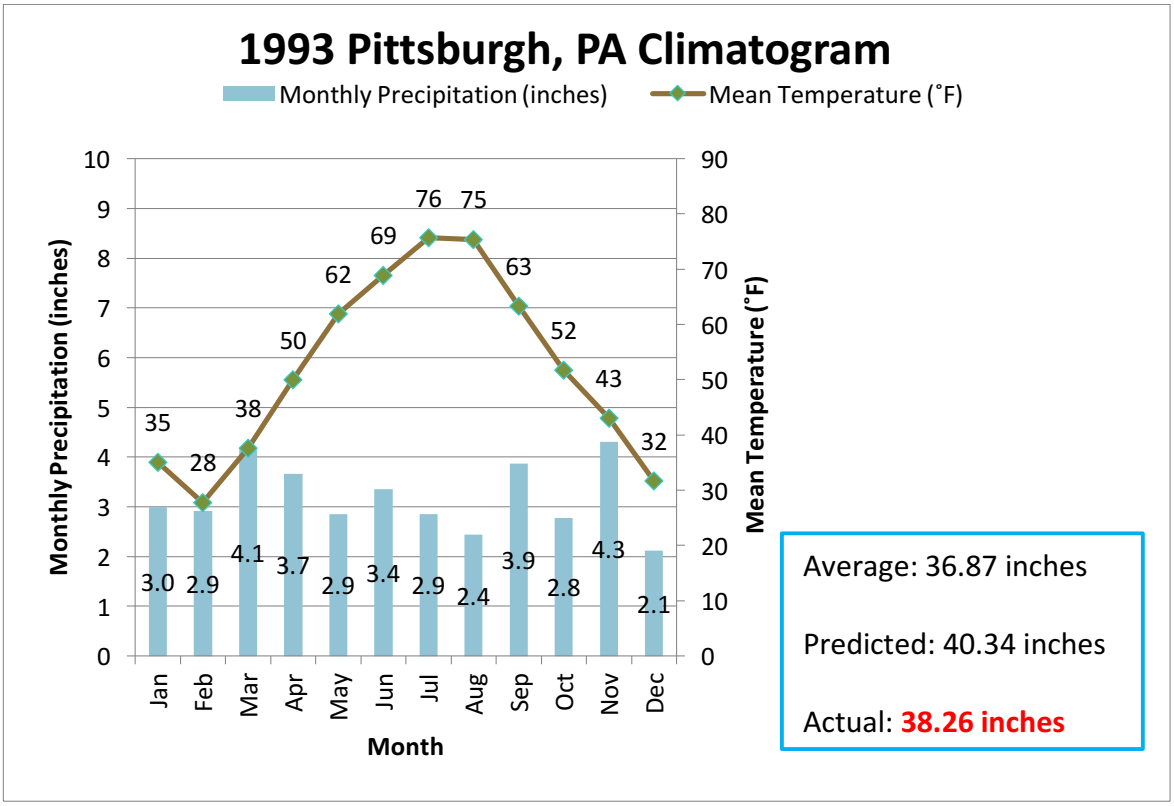

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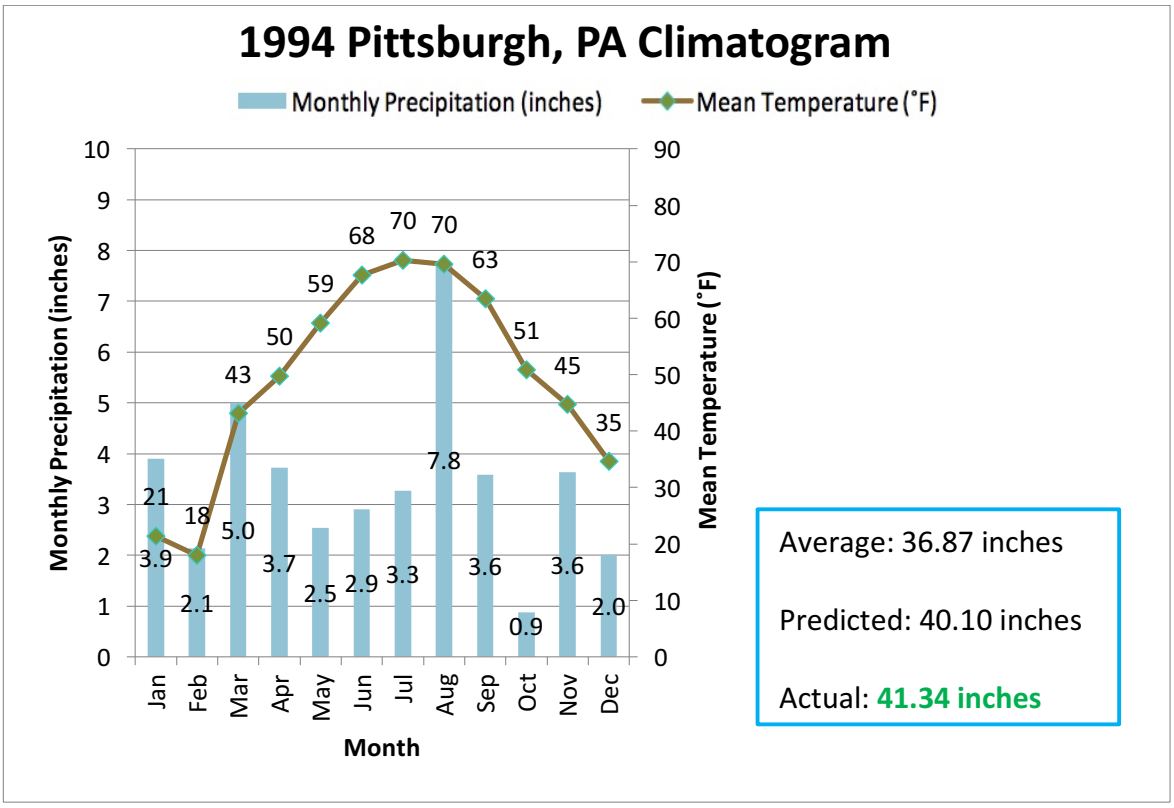

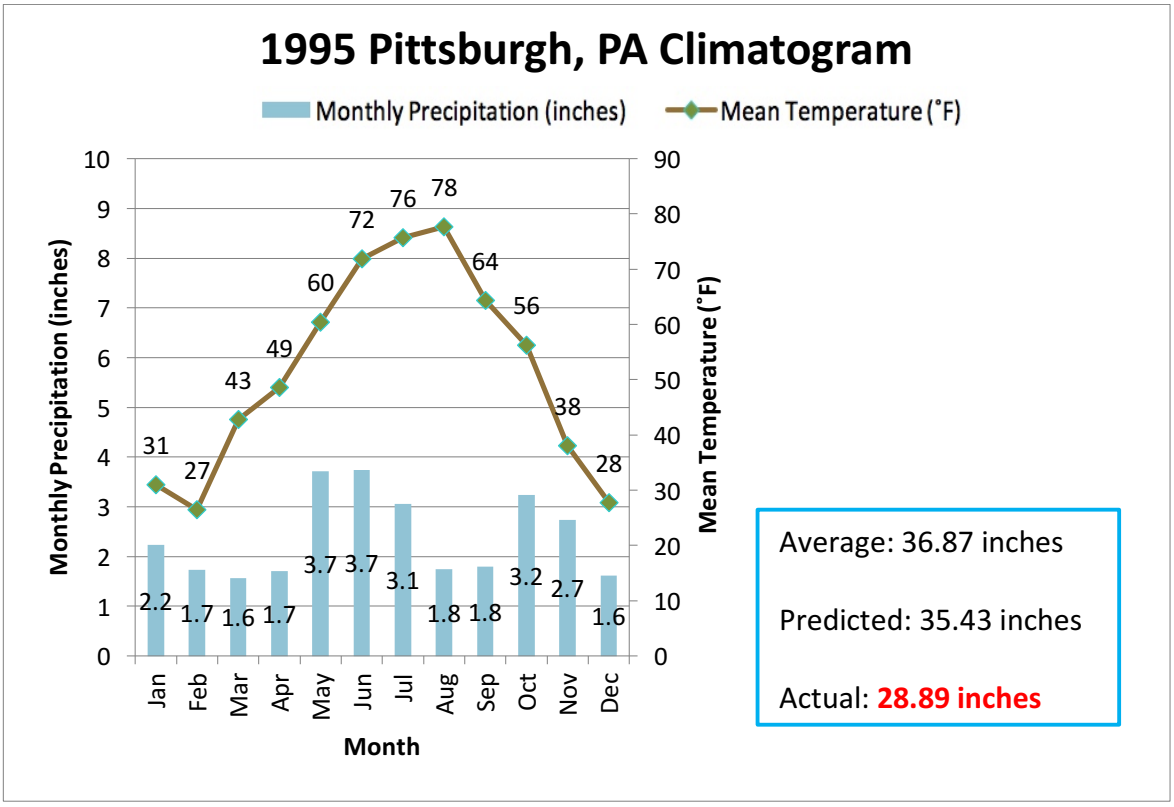

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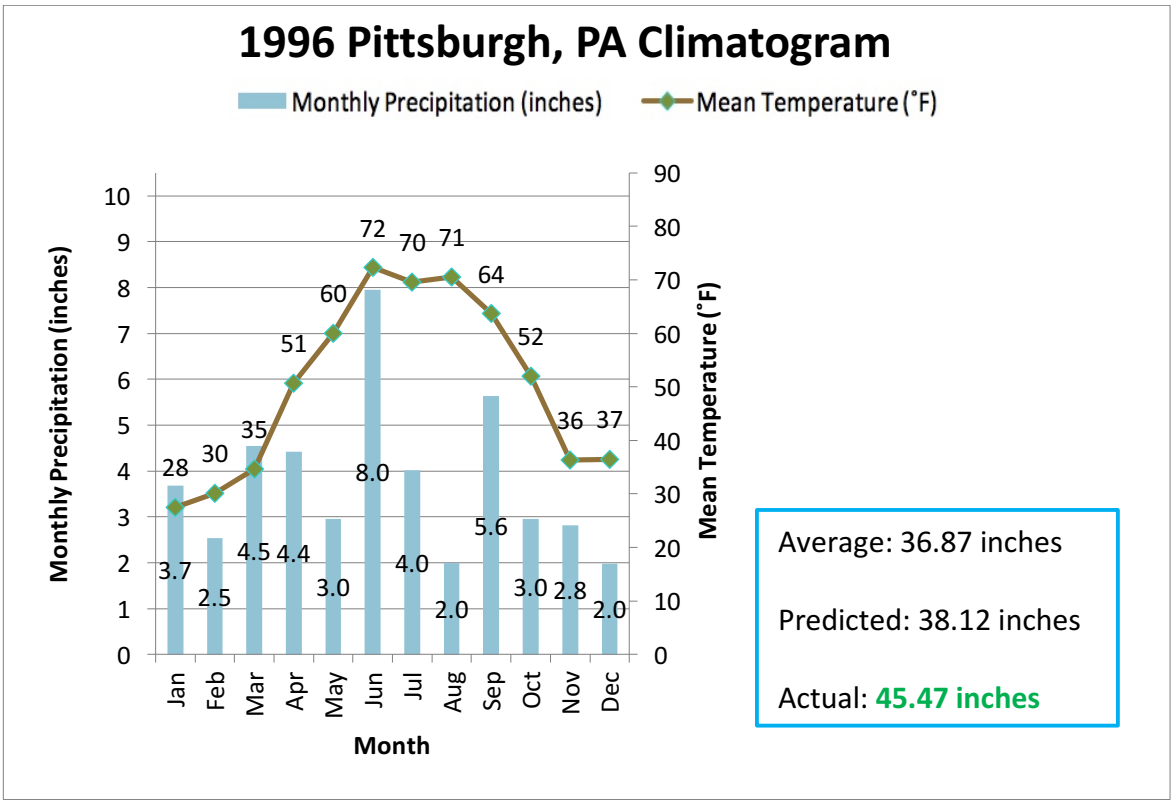

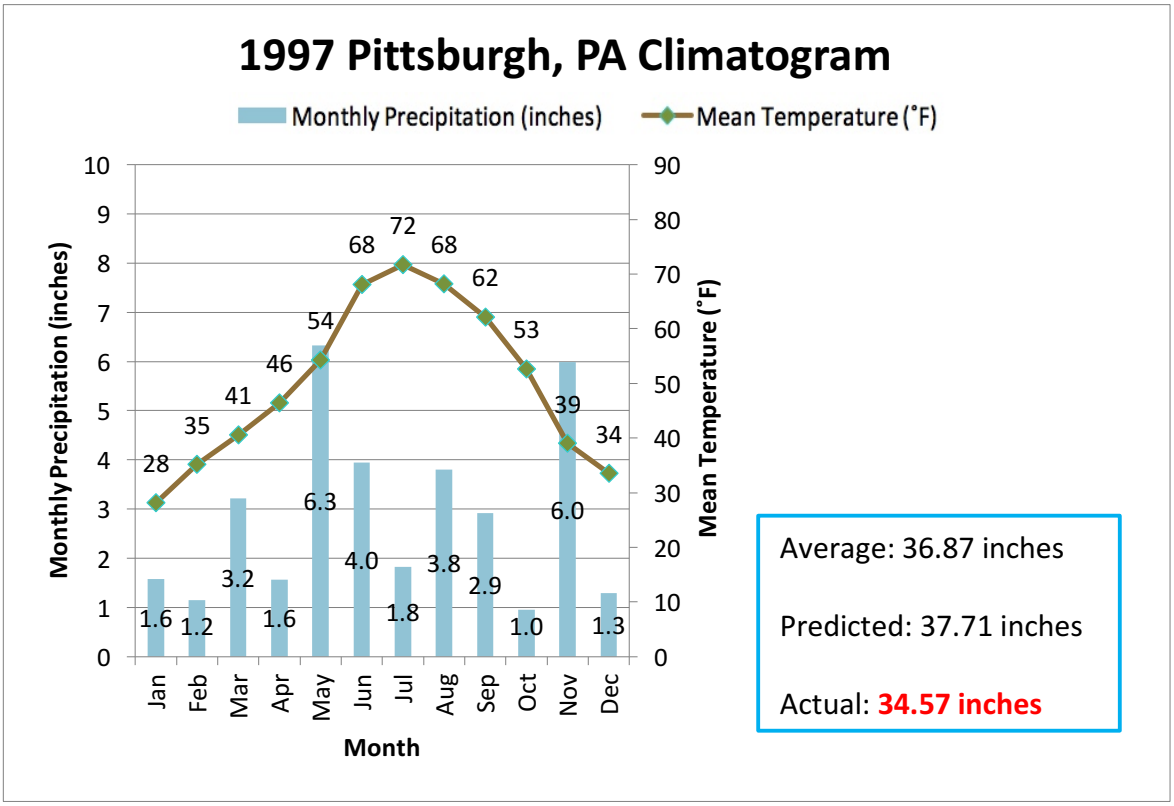

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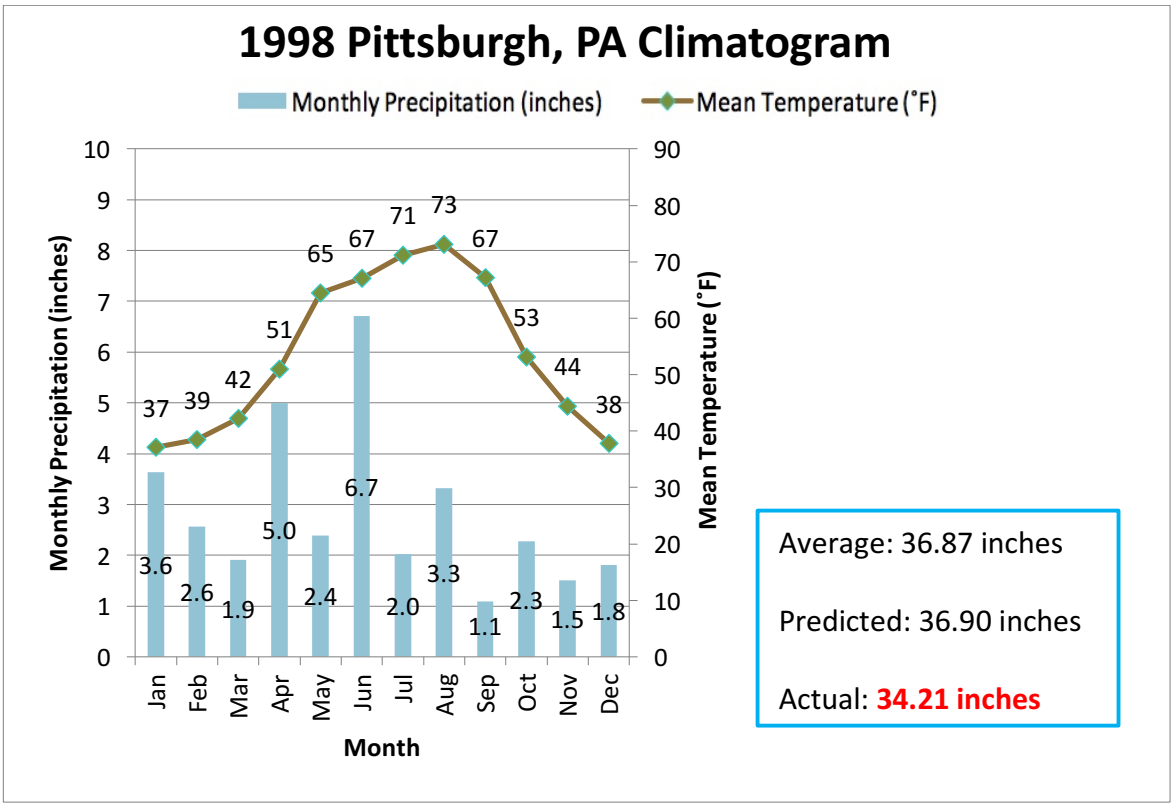

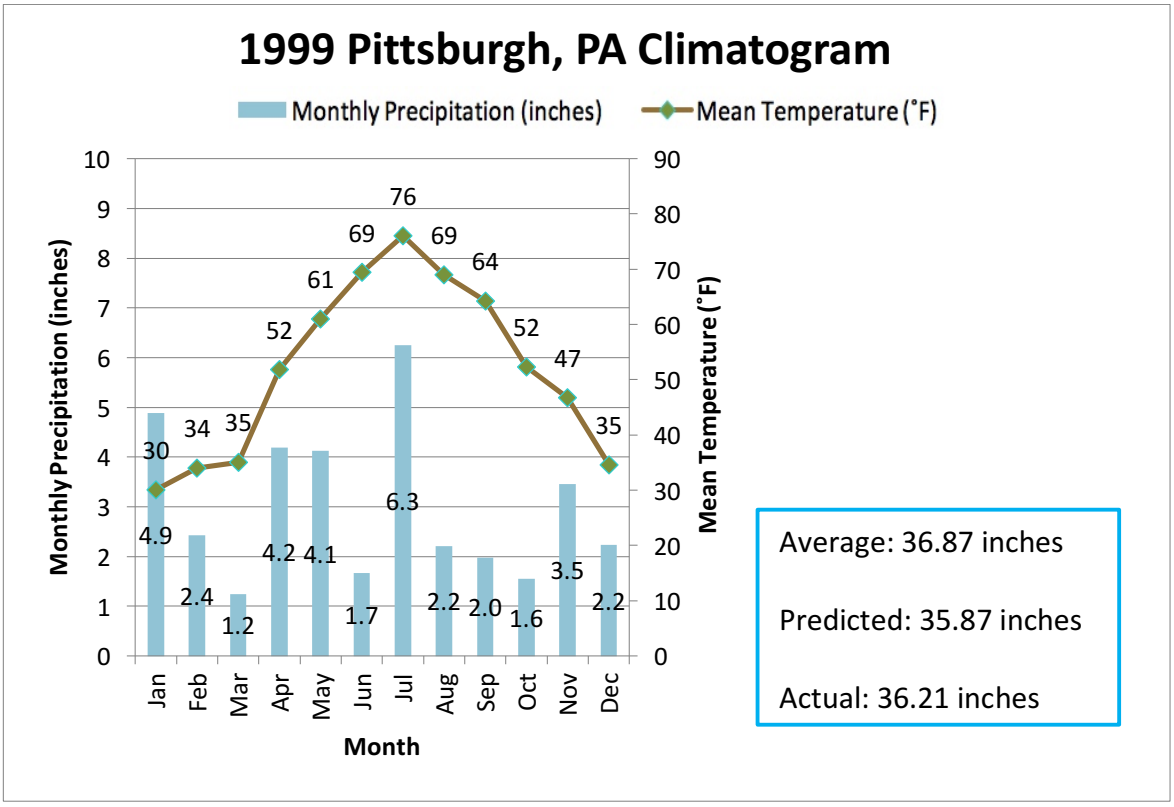

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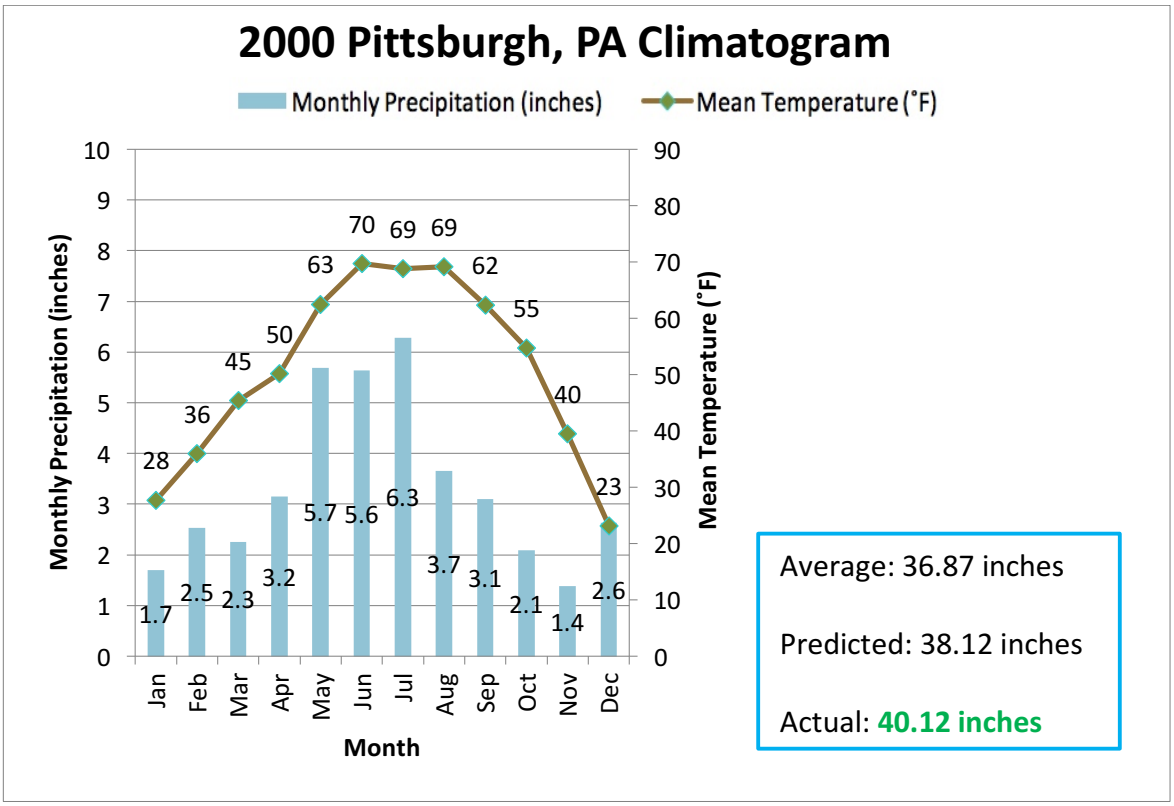

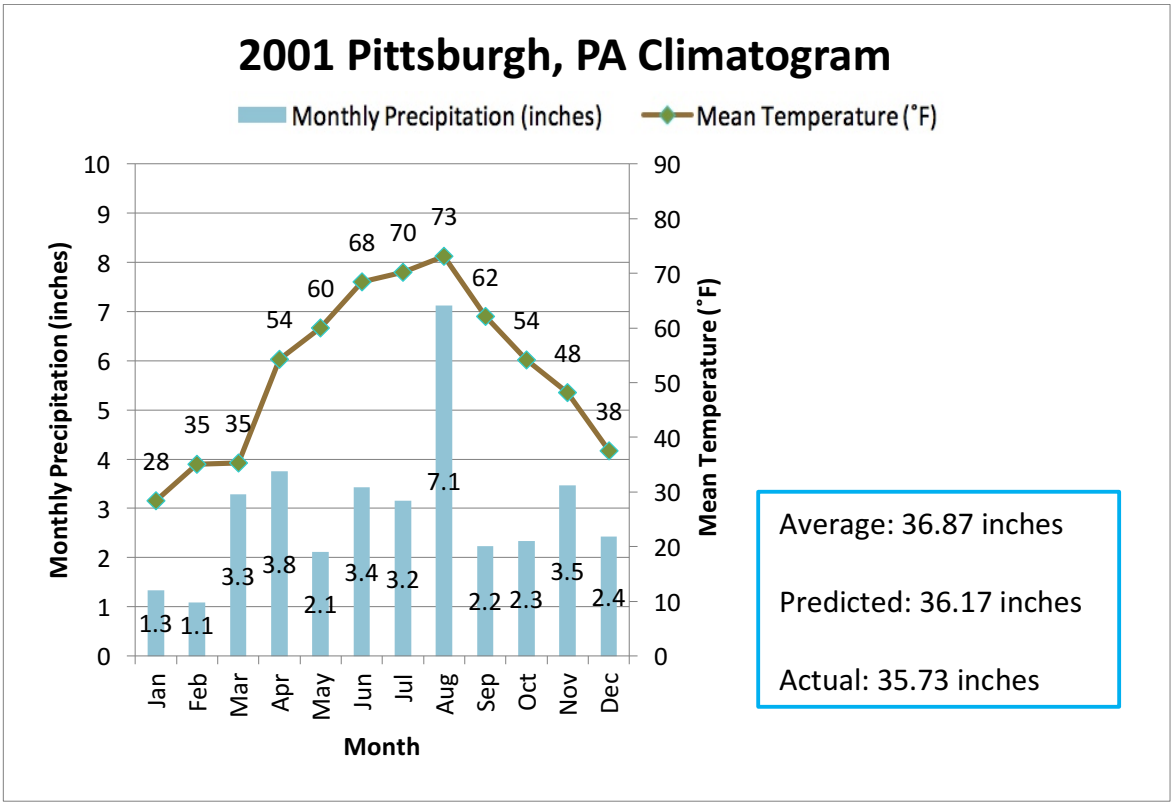

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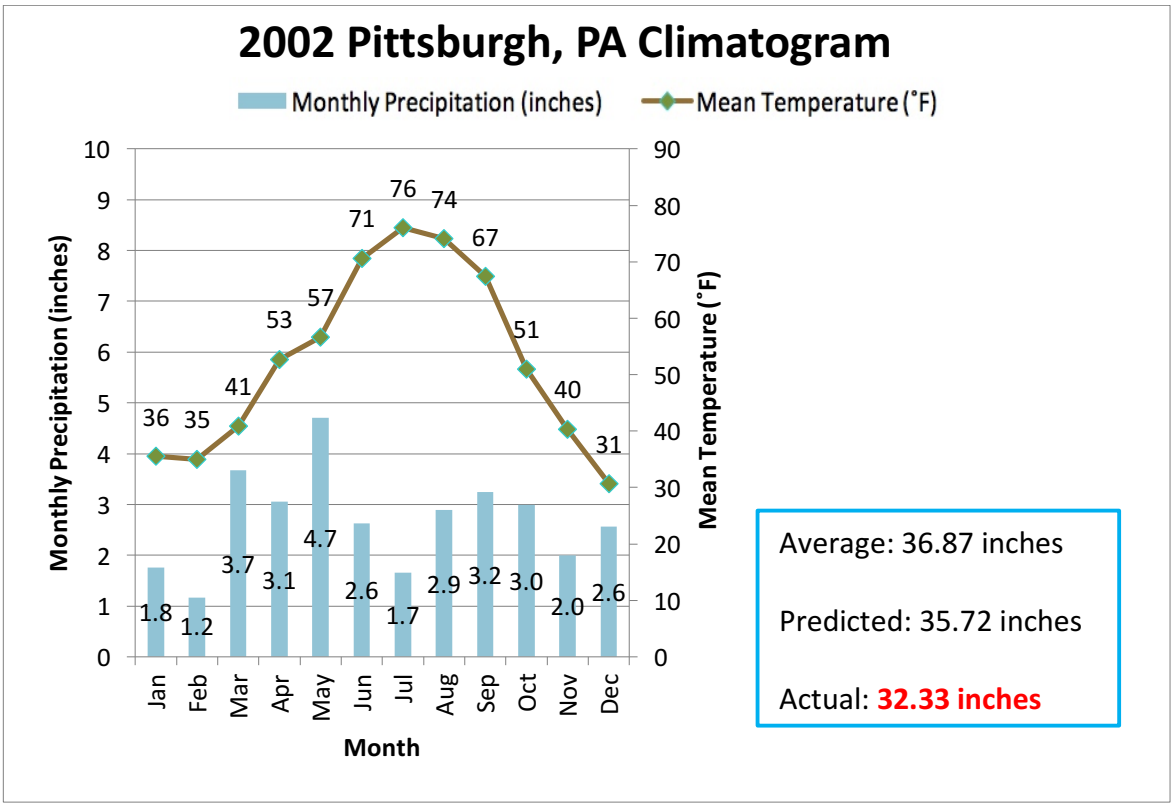

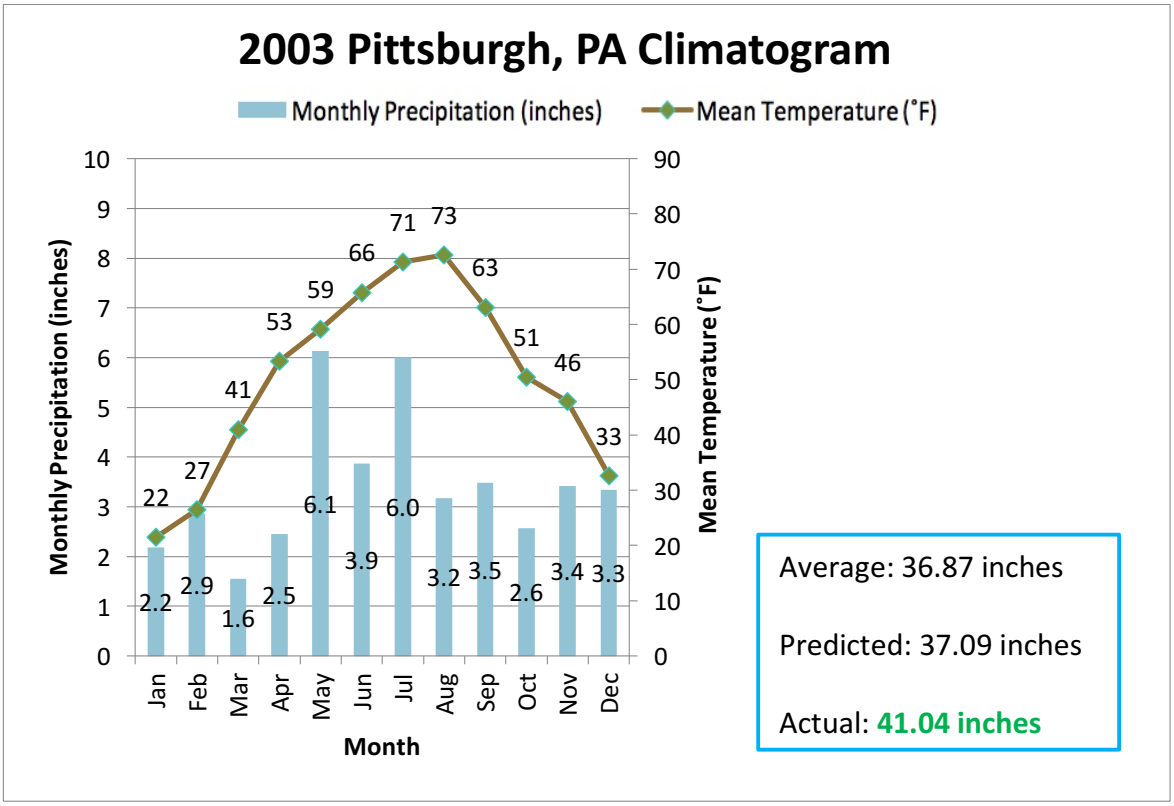

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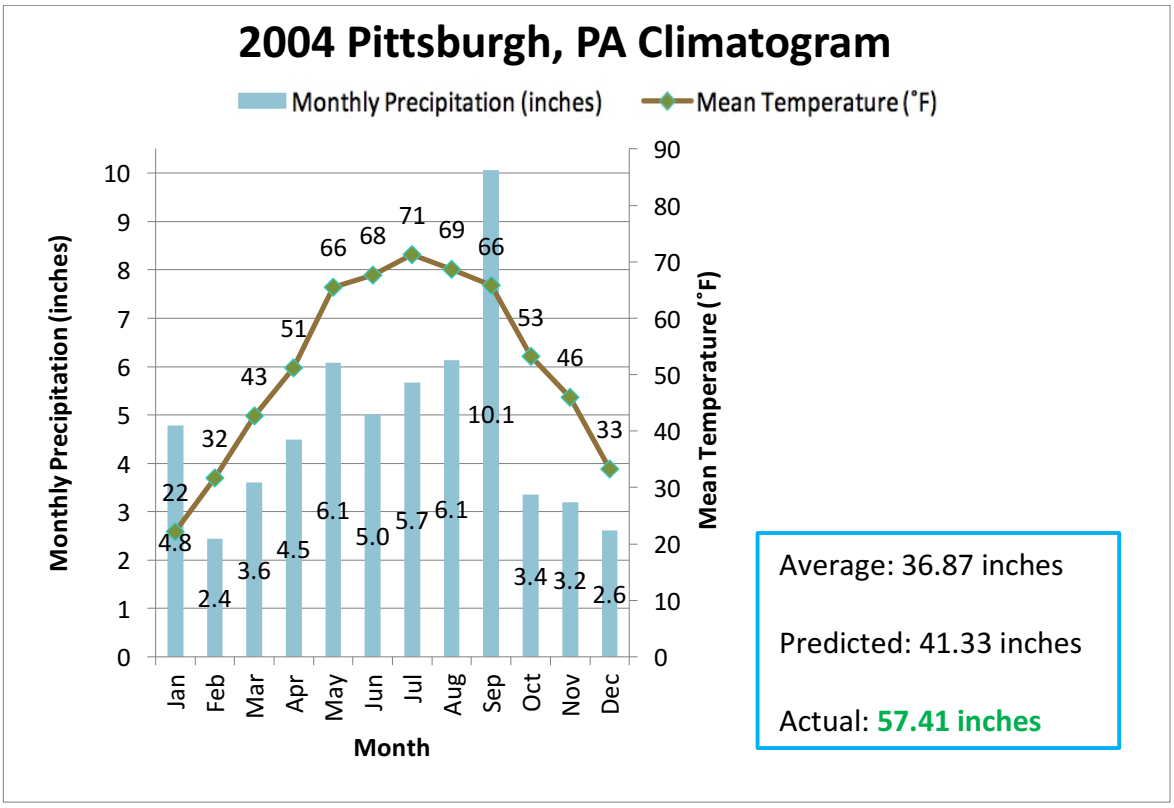

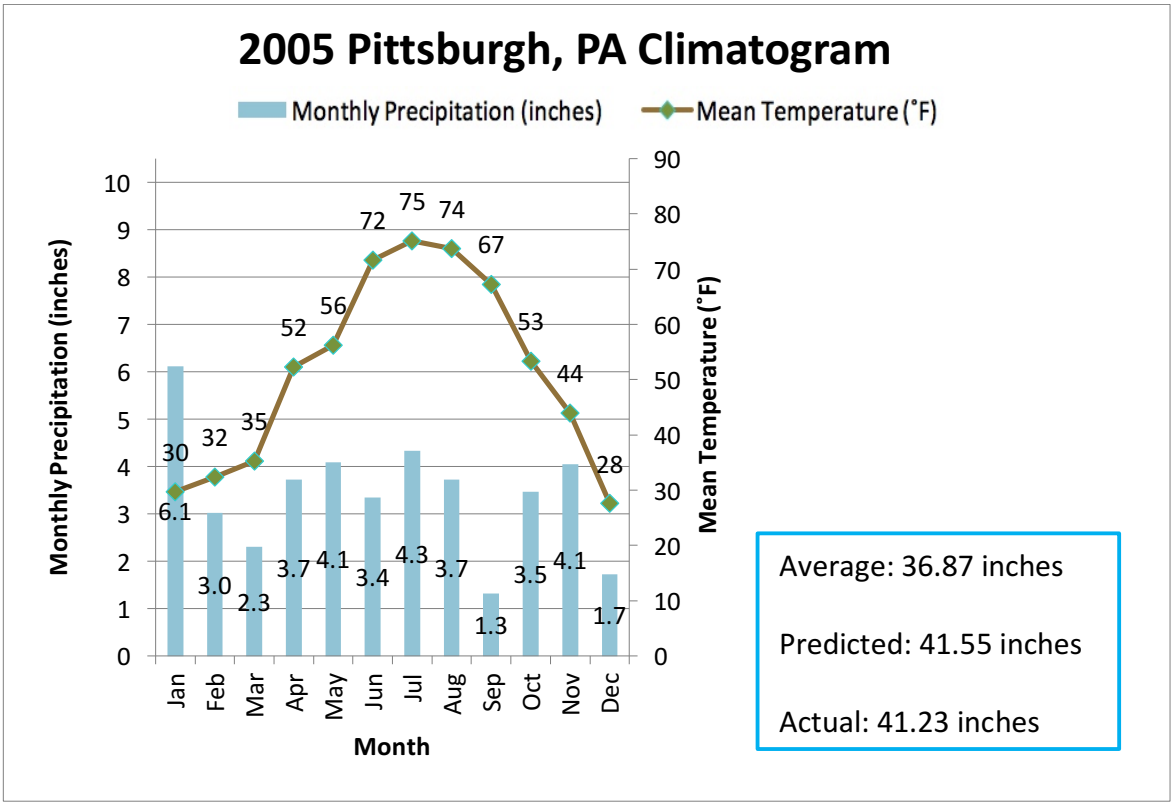

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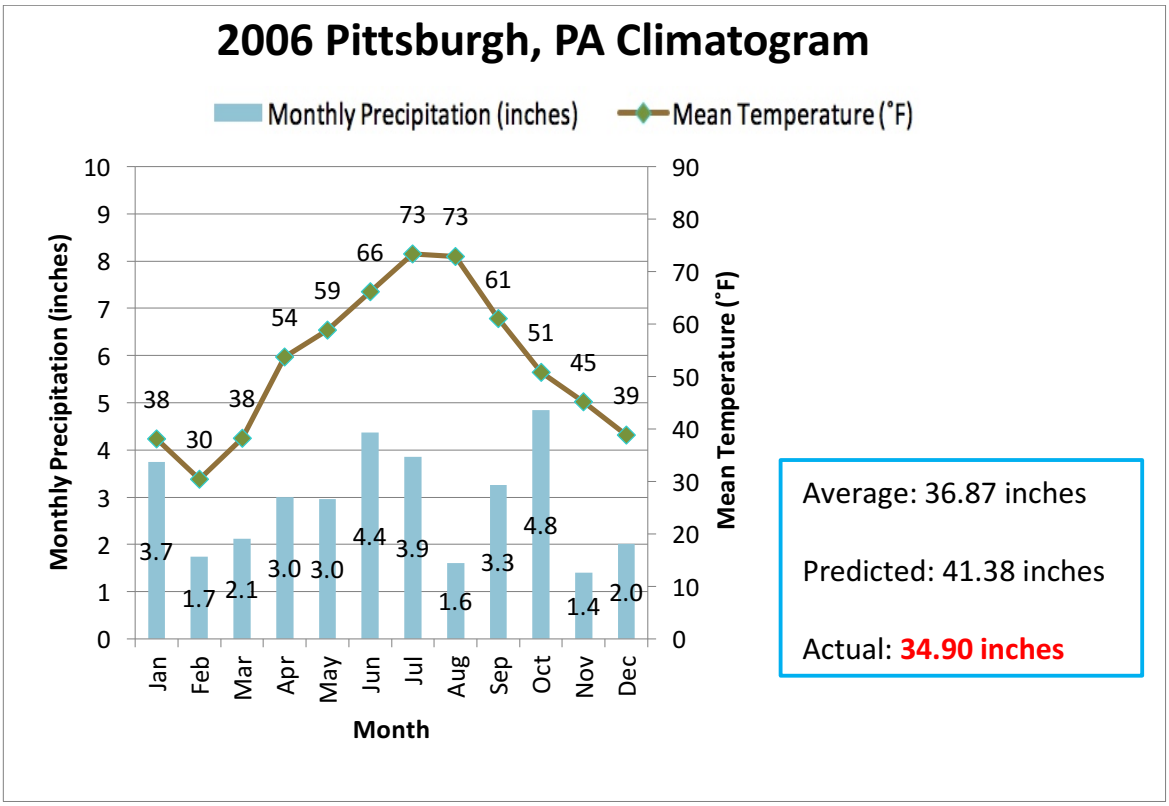

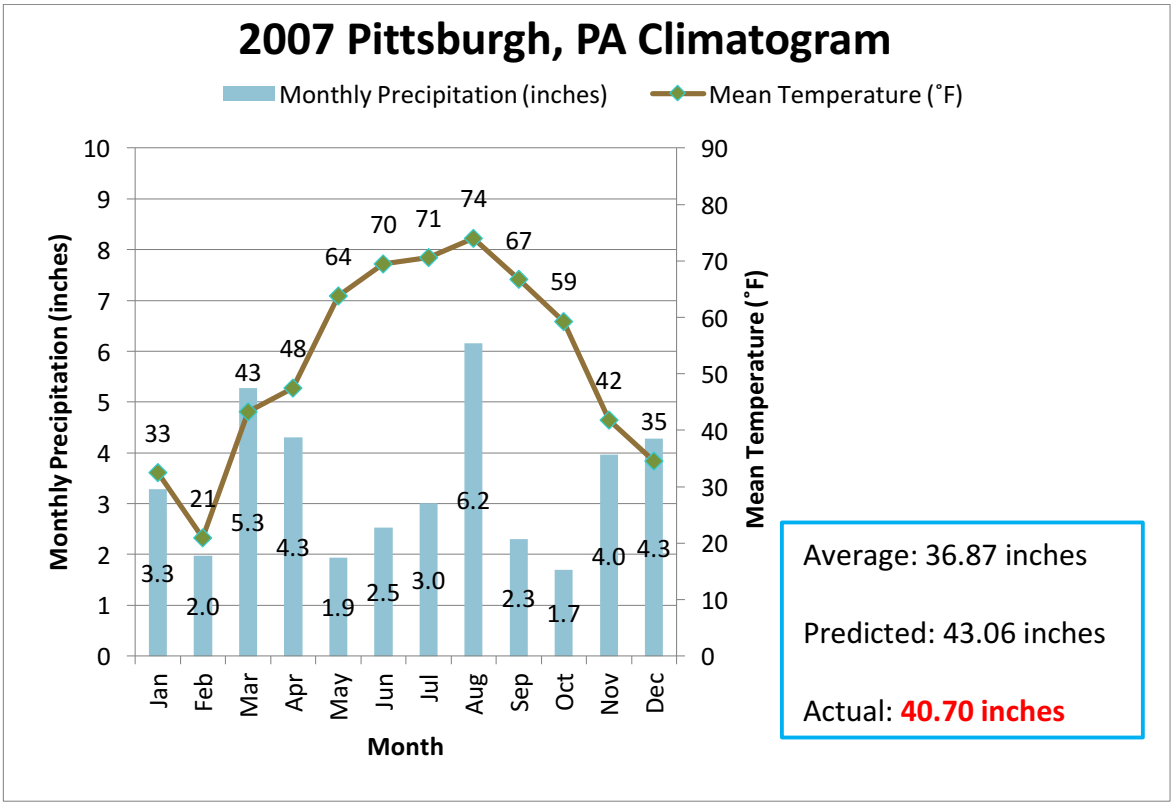

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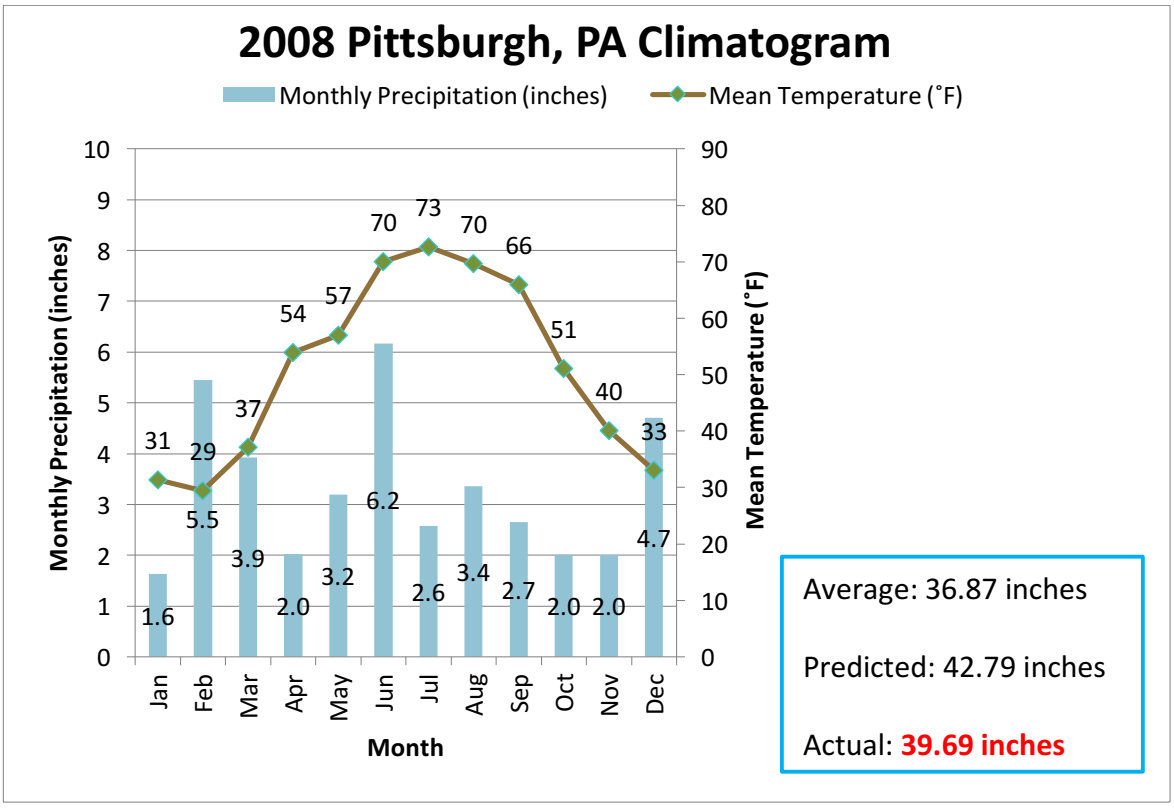

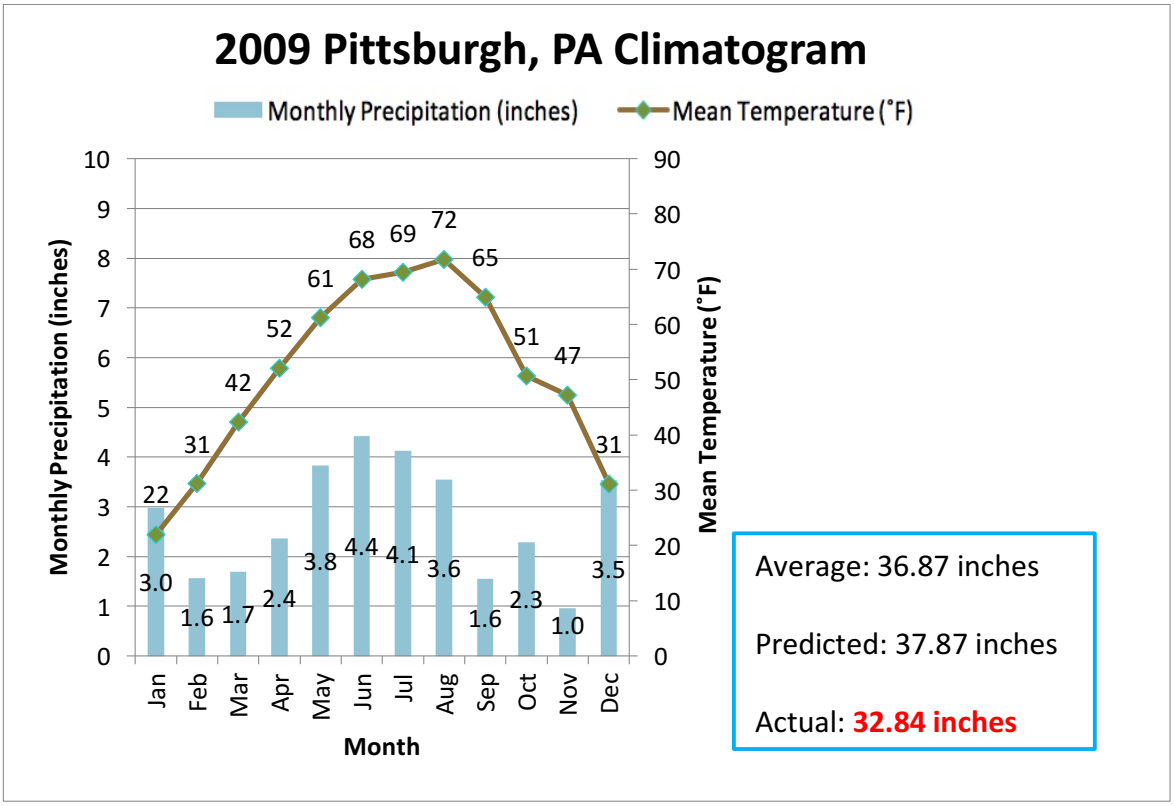

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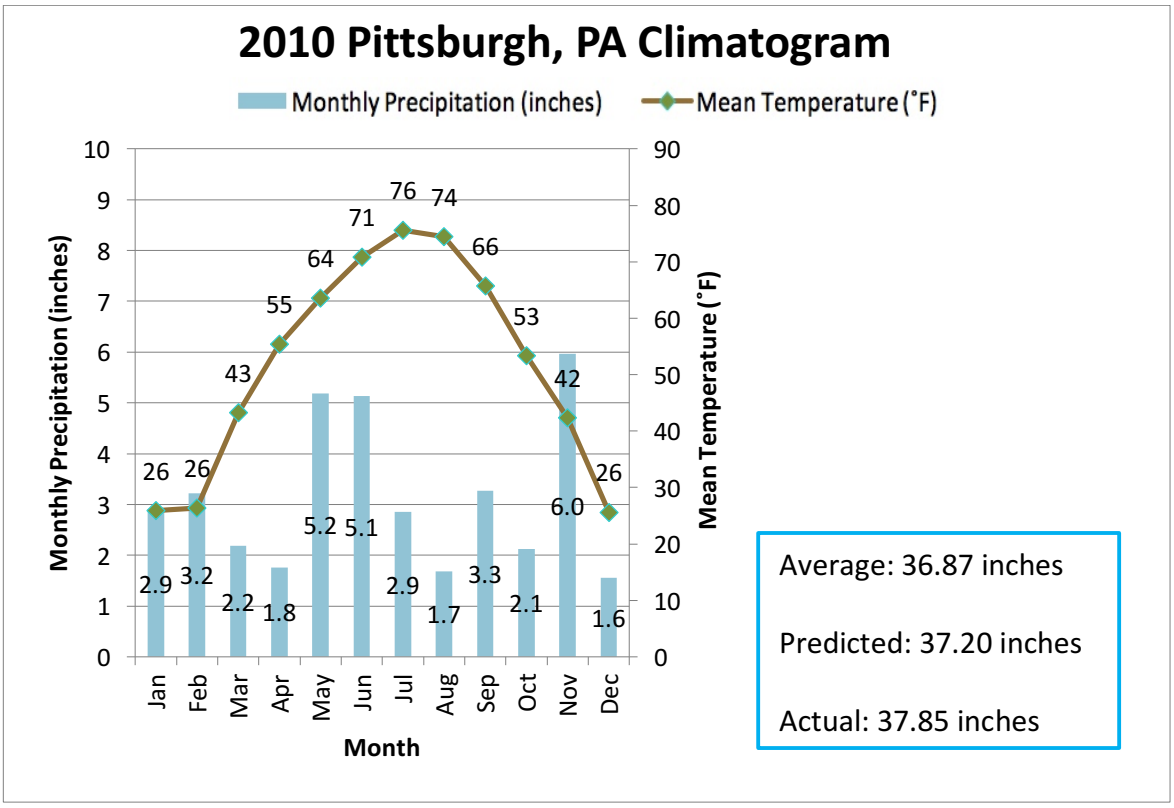

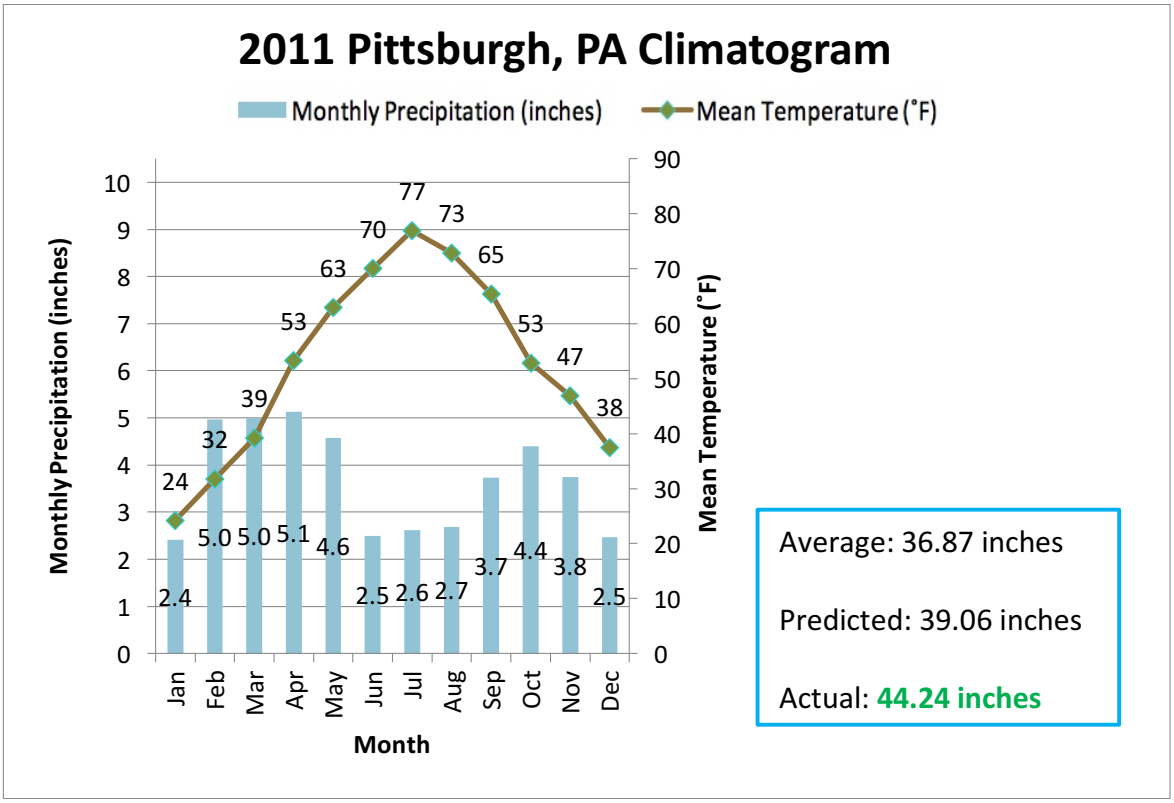

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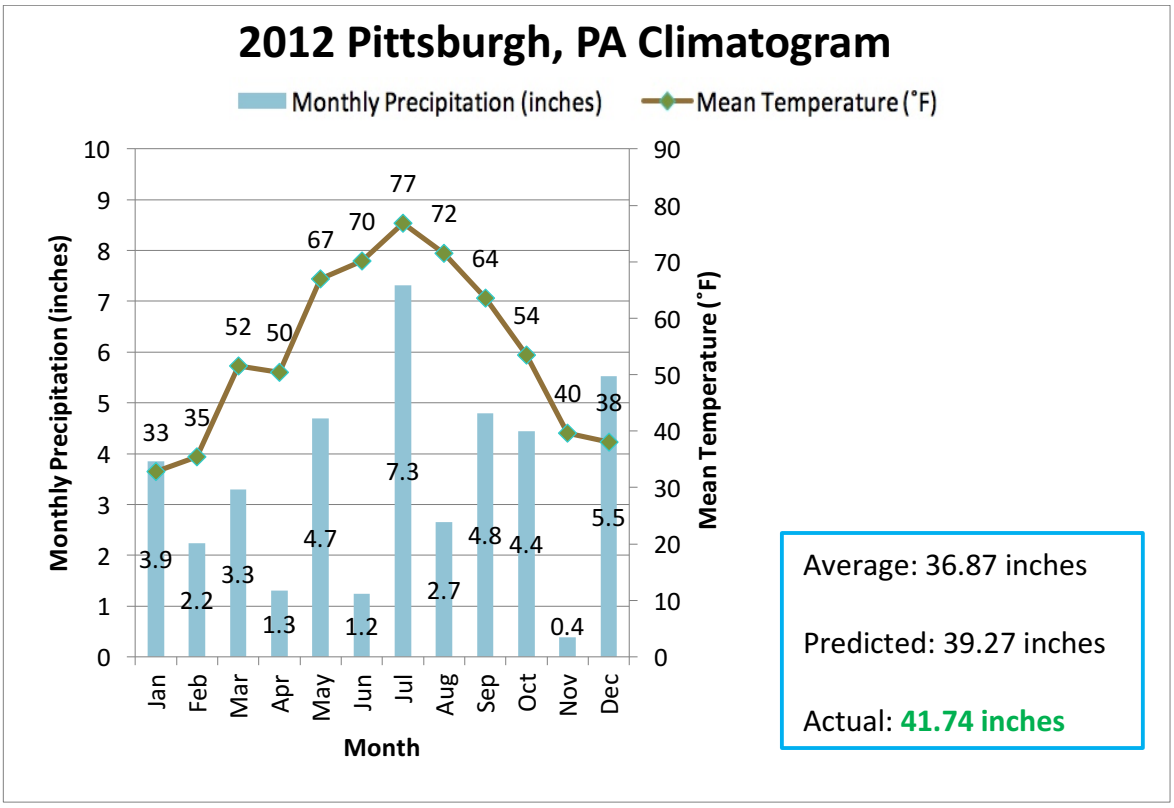

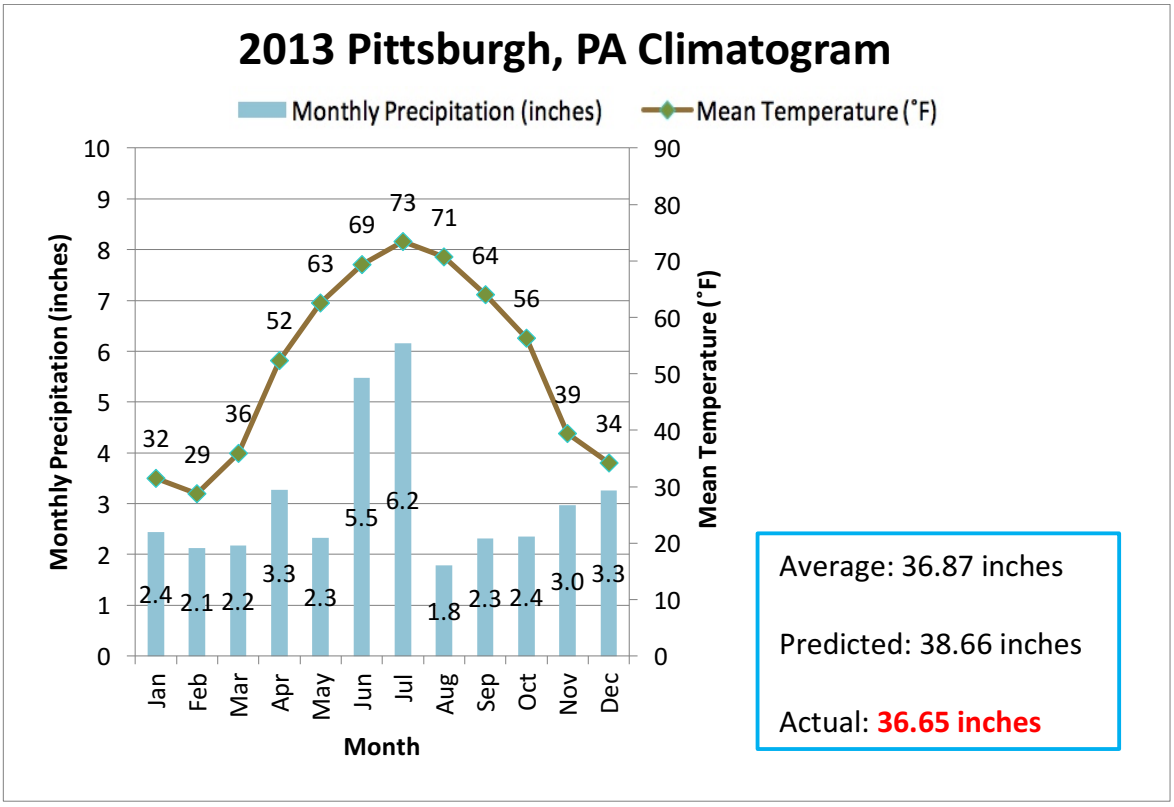

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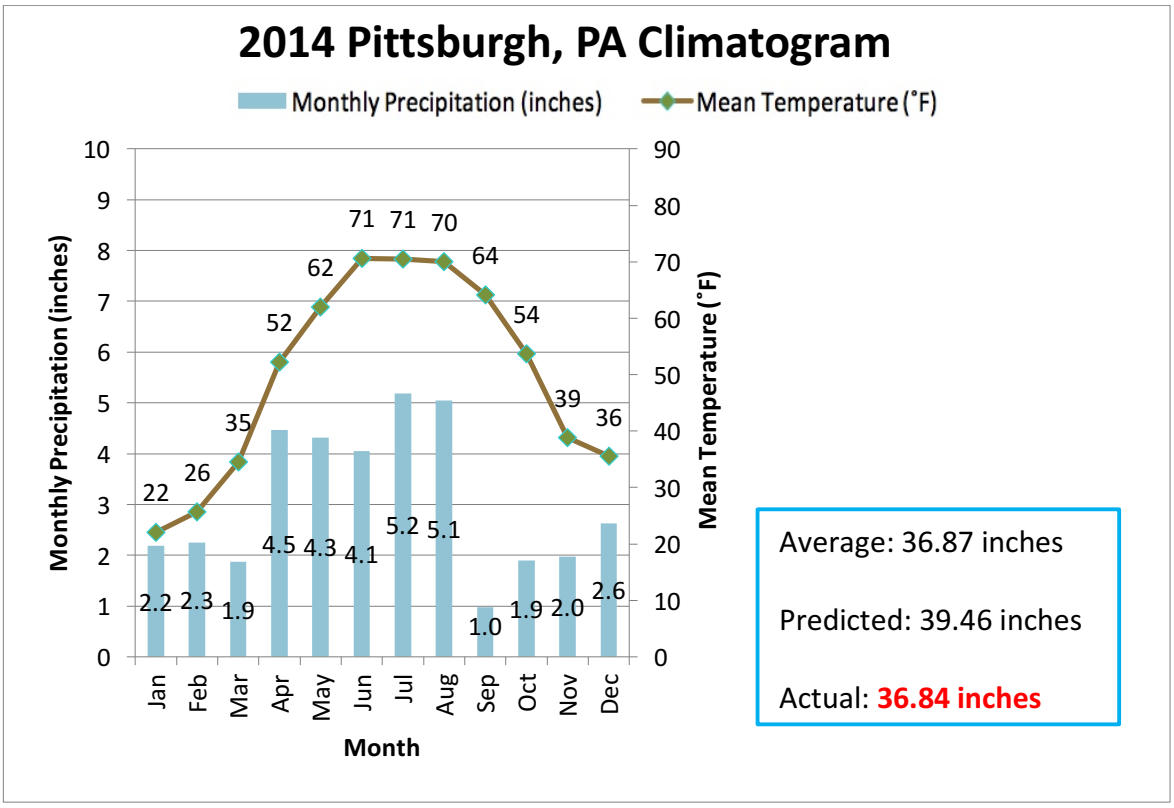

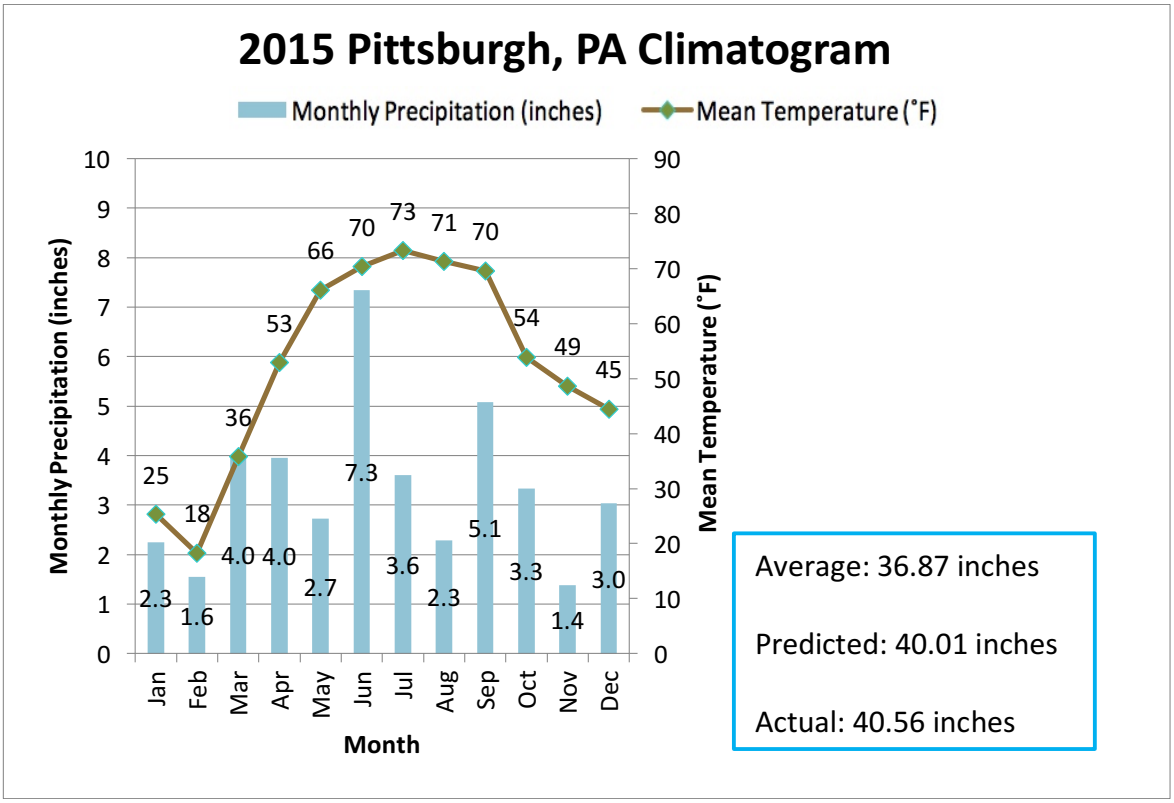

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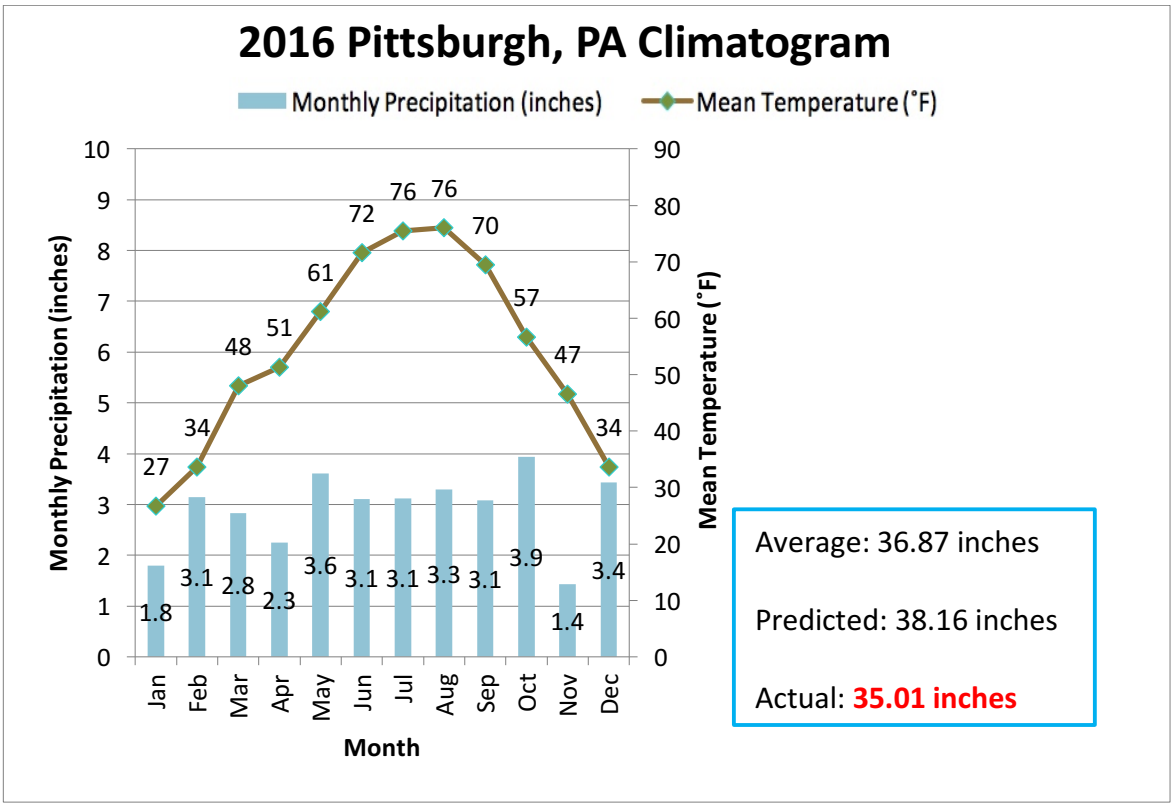

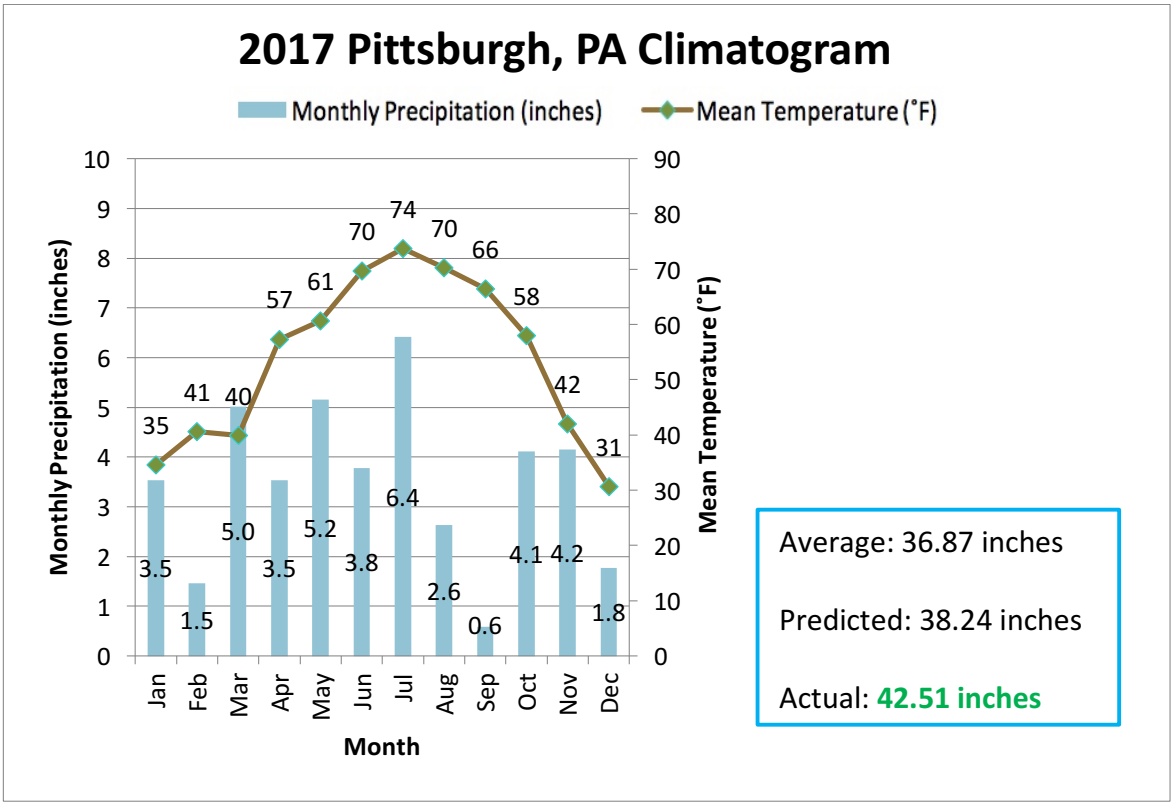

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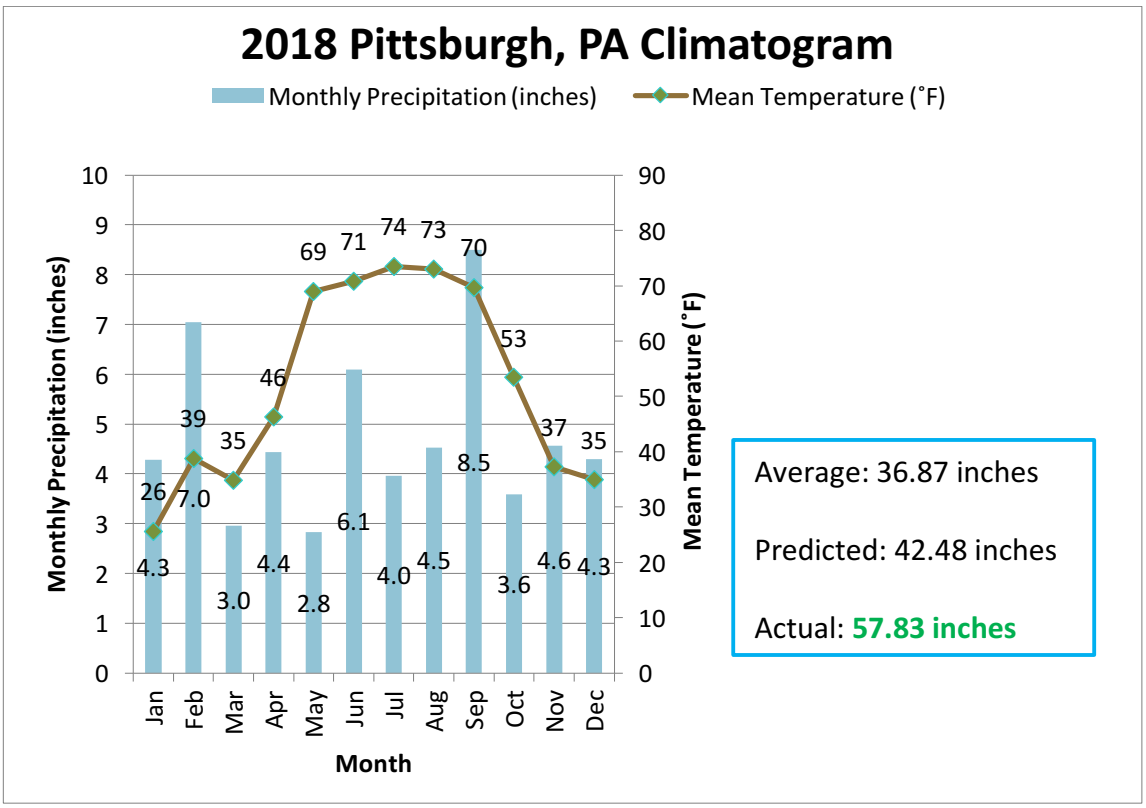

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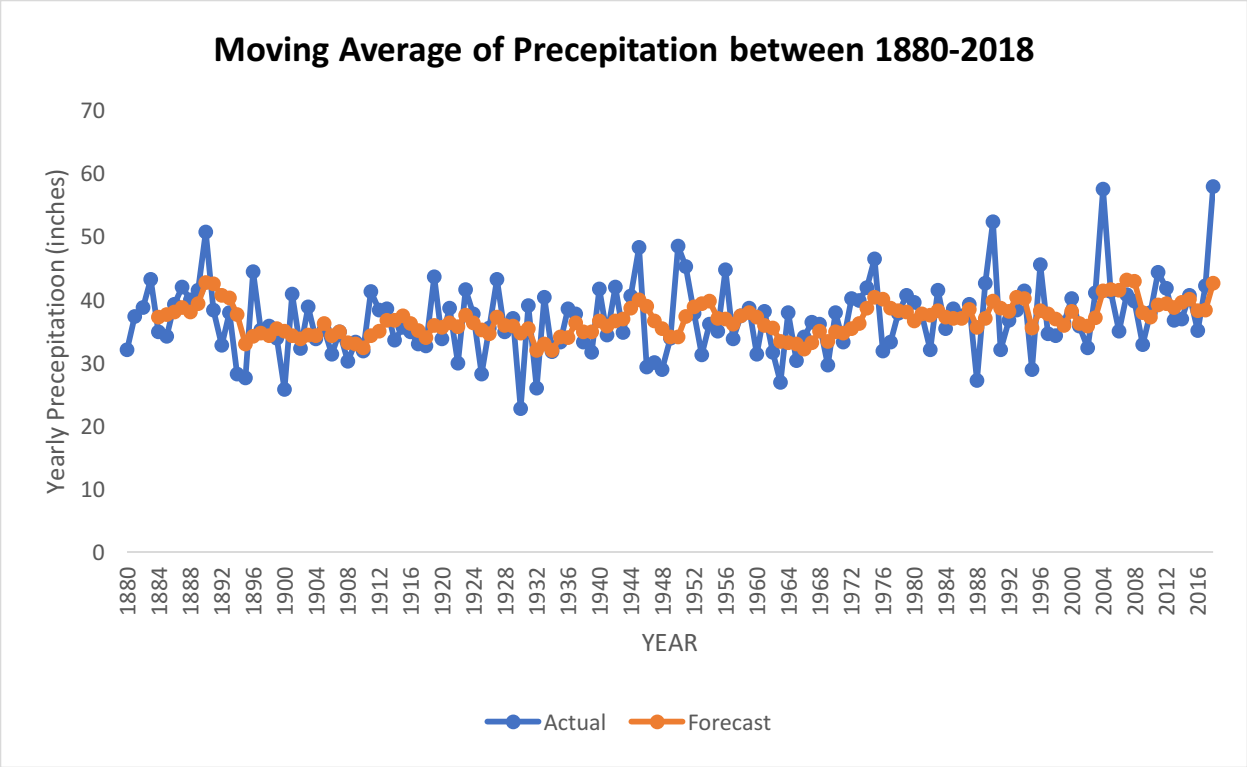

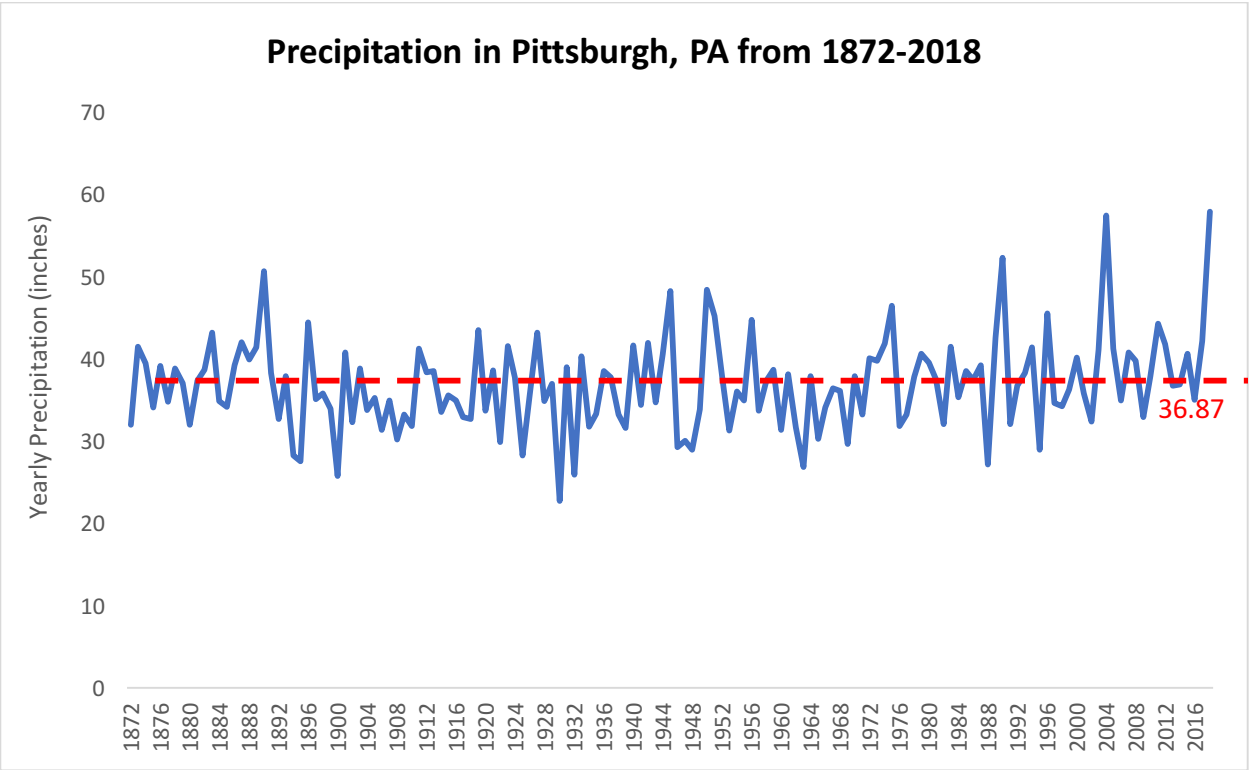

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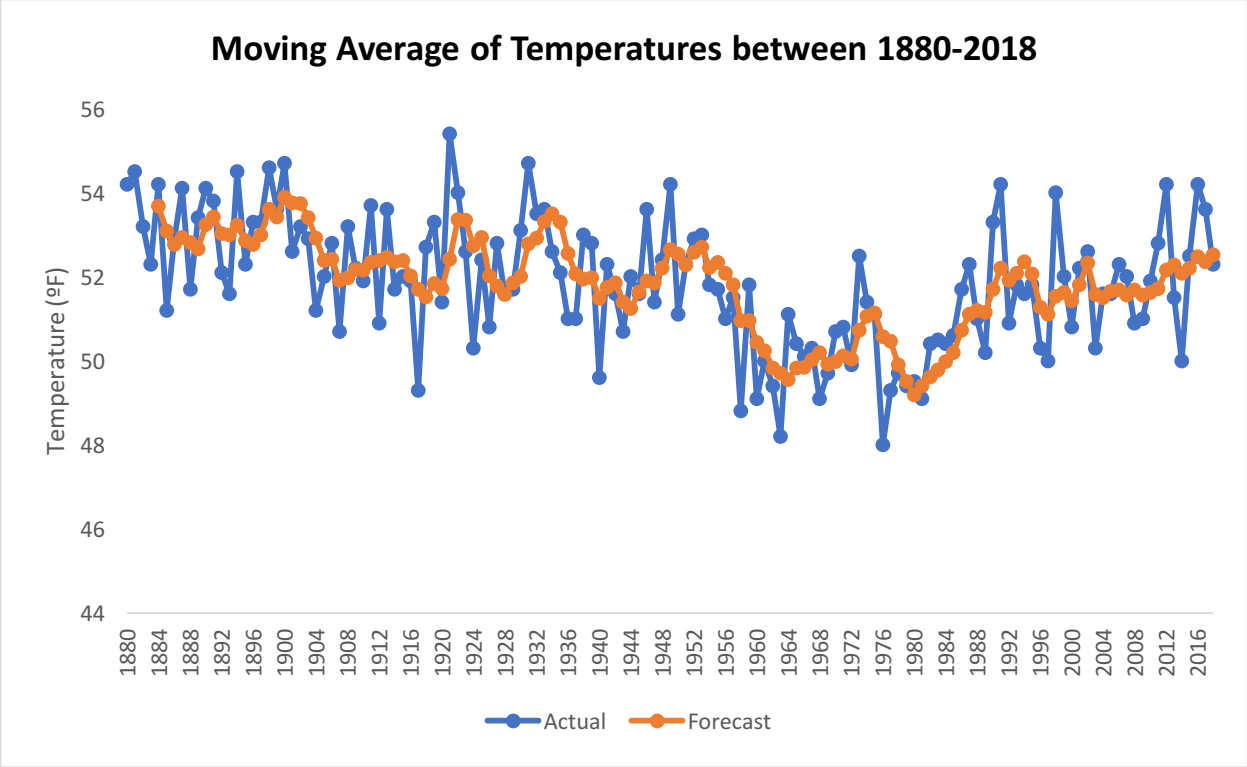

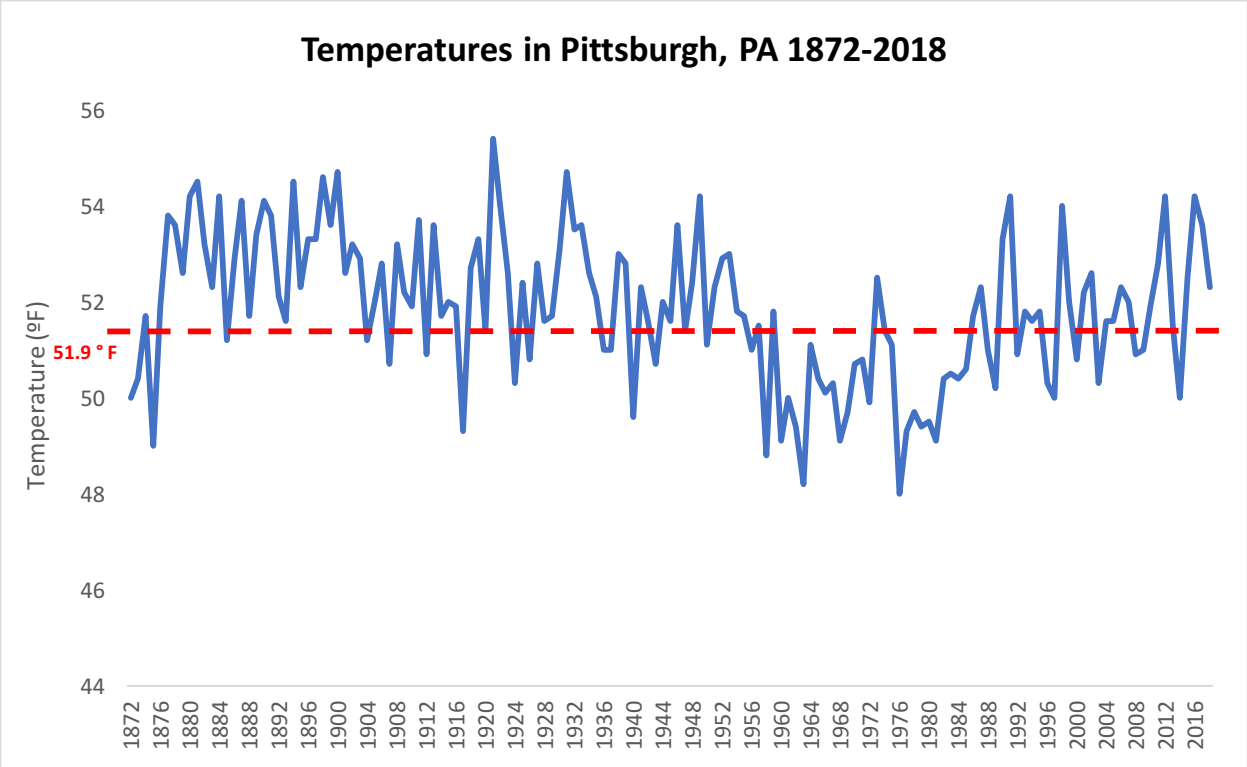

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