

## Summer (June through August), 2008 Final Temperature Forecast for Philadelphia International Airport (PHL)

The forecast mean  
summer temperature is:  
76.9

67% confidence  
interval is:  
75.7 - 78.1

90% confidence  
interval is:  
74.8 - 78.9

The forecast value is given in degrees Fahrenheit. The normal summer temperature at PHL is 75.4 degrees. Summer is defined as meteorological summer, i.e., the months of June through August.

The above forecast is from a multiple linear regression equation that was derived from data from 1966 through 2007 that came from PHL. It was found that the combination of the Julian date of the first heat wave of the season and the mean April minimum temperature explains approximately 35 percent of the variance in the mean summer temperature.

The technique results in a specific forecast value and associated confidence intervals. So, the forecast of the mean summer temperature is 76.9 degrees; there is a 67% chance that the actual mean summer temperature will fall between 75.7 and 78.1 degrees, and there is a 90% chance that the actual mean summer temperature will fall between 74.8 and 78.9 degrees.

For purposes of this forecast, a heat wave is defined as at least three consecutive days with maximum temperatures of at least 90 degrees. The first heat wave of the season began on June 7th.