2012 Rainfall Analysis

Historical Rainfall Comparison

The rainfall for the year of 2012 was above the 30-year average. The historical average total rainfall (1981 to 2011) is 35.71 inches, while the 2012 total was 51.14 inches, the highest annual rainfall on record.

Monthly Averages

Below is a chart showing the 30-year average monthly rainfall (blue) and the 2012 totals (red).

*Gauge location: near I-405 and SR 520 interchange, Bellevue, WA*
Similarly, below is a box plot\(^1\) showing 30-year monthly rainfall statistics with the monthly totals for 2012 represented by the red diamond.

*Gauge location: near I-405 and SR 520 interchange, Bellevue, WA

In these charts one can see that the year of 2012 was somewhat unusual with respect to previous 30-year trends. Ten out of the twelve months recorded rainfalls within the top and bottom 25\(^{th}\) percentiles of the data. In other words, only two months of the year had rainfall totals within the expected range. Of the ten atypical months, all but two (August and September) had above-average rainfalls. The highest of these rainfalls occurred in November and December. Both June and August rainfalls were among the most extreme recorded, with June producing the highest rainfall on record for that month, and August tying with 2002 for lowest recorded August rainfall. Overall, 2012 proved to be an extreme year, with the highest total rainfall on record of 51.14 inches.

\(^1\) A box plot is a graphical depiction of a statistical summary of a dataset. The upper-most and lower-most boundaries of the box represent the upper and lower quartiles (75\(^{th}\) and 25\(^{th}\) percentiles), respectively. The line in the center of the box represents the median data point (50\(^{th}\) percentile). The upper and lower points, connected to the box by vertical lines, represent the highest and lowest observed data points.