

**Title:** What about Park Factors? – Park Factors and their Impact on Minor League Baseball

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**Abstract:** At ARC 2015, developmental data on using predictive analytics in Minor League Baseball was presented. Pitchers were evaluated using the Bill James game score statistic, and this data was used to build developmental linear predictive models for the performance of pitchers as they transitioned from Minor League Baseball to Major League Baseball. As a part of the question and answer session that followed, a new research question was proposed: What about park factors?

A newer discussion in the world of baseball analytics is that of park factors, also referred to as park effects or park adjustments. Often we have heard "Yankee Stadium is a home run park", but what does that really mean? There are no set regulations on the outfield dimensions of baseball parks. Due to the lack of regulations on dimensions and the differing atmospheric conditions of parks, the park factor is calculated to account for these differences. In this presentation, a brief summary of the 2015 data will be presented along with new data that accounts for the confounding park factor variable. It will be eye-opening to enthusiasts of baseball and actuarial practitioners to see the difference that one confounding variable can make in the analysis of a data set. Practical implications for accounting for confounding will also be discussed.