



Scoring with New Thinking

In many sports, new analytics are being used to pinpoint the crucial factors that underlie performance and, ultimately, the outcome of the game. In baseball, modern statistics such as *wins above replacement* (the difference between the number of wins a player contributes versus that of a freely available replacement) are now often given more weight than the standard measures of batting average (fraction of hits per plate appearances) and earned run average (runs—not due to errors—allowed per nine innings). Major League teams now employ over 100 analysts who quantify many aspects of the game in order to better understand it. In fact, math has become so common that one team analyst said, “Frankly, it’s easier to list what math isn’t used for than what it is.”

Radar and cameras in every Major League stadium track the ball and the movements of players, generating terabytes of data for each game. Baseball analysts use this output to mathematically model the game and find the keys to increasing runs scored and decreasing runs allowed. The methodical analysis by professionals and fans alike has led to revelations that have changed decision making on the field and off (when players are signed or traded). For example, it’s been discovered that a baserunner has a more negative effect on a batter than on the defense. Purists may

wonder if modern analysis is better than the old ways, but as they say in the Virtual Reality batting cages at baseball stadiums: You be the Judge.

For More Information:

The Book: Playing the Percentages in Baseball, Tango, Lichtman, and Dolphin, 2013.

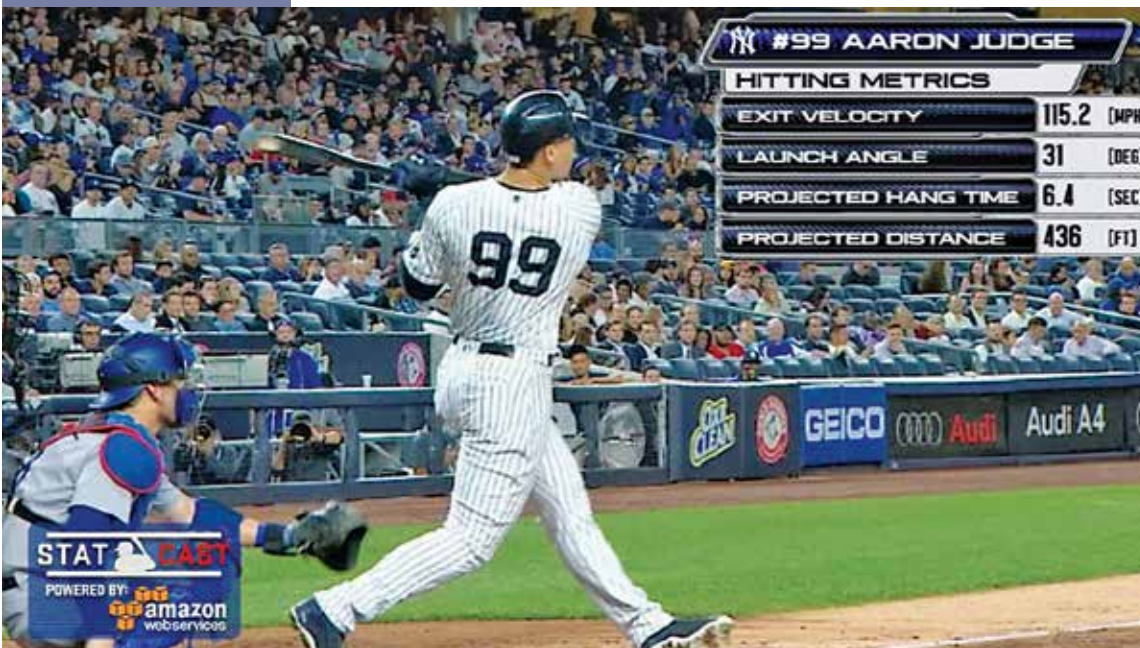
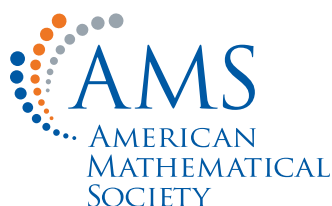


Image courtesy of MLB.com.

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