Using FIELDf/x to assess fielders’ routes to fly balls

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Introduction

Concerns have been raised about the reliability of fielding metrics.

A problem is seen in biases in batted-ball classifications and inaccuracies in batted-ball locations.

Player and batted-ball tracking would go a long way to addressing some of these problems.
Introduction

The FIELDf/x data offer the potential to address some of these issues, especially combined with complete tracking of the ball in play.

Here I look at one aspect of this potential use of FIELDf/x: paths taken to balls in the air (fly balls, line drives, pop ups).

This talk will take a descriptive look at the data, with speculation at the end about how they could be used for fielding evaluation.
Introduction

Sportvision provided the movement of fielders as well as the time the ball was hit, time a fielder came in possession of the ball and the time the fielder released the ball.

From this we can reconstruct the path to the ball from the time the ball left the bat to the time the play was made.
Fielder Positions

First a brief detour to look at fielder positioning

Matt Thomas has showed us similar data from St. Louis at last year’s summit

Use the position of each player at the time the ball is hit
Routes to Fly Balls

How direct the path was

Playing a ball in front vs. ball behind

Catching the ball on the run vs. getting there in time to stop for it
Routes to Fly Balls

How direct the path was

Playing a ball in front vs. ball behind

Catching the ball on the run vs. getting there in time to stop for it
5/30 5th inning
Chris Young catches a
Freddy Sánchez fly ball
4.24 seconds
5/25 5th inning
Roger Bernadina catches a Bengie Molina fly ball
4.83 seconds
5/26 3rd inning
Nyjer Morgan catches a Nate Schierholtz fly ball
4.84 seconds
6/1 10th inning
Carlos González catches a Bengie Molina pop up
5.30 seconds
Routes to Fly Balls

How direct the path was

Playing a ball in front vs. ball behind

Catching the ball on the run vs. getting there in time to stop for it
5/25 6th inning
Cristian Guzmán catches a Juan Uribe pop up
6.16 seconds
5/26 8th inning
Nyjer Morgan catches a Freddy Sánchez fly ball
5.03 seconds
Routes to Fly Balls

How direct the path was

Playing a ball in front vs. ball behind

Catching the ball on the run vs. getting there in time to stop for it
5/31 4th inning
Carlos González catches a Juan Uribe fly ball
4.37 seconds
5/25 5th inning
Roger Bernadina catches an Aaron Rowand fly ball
4.37 seconds
5/28 2nd inning
Justin Upton catches an Aaron Rowand fly ball
4.77 seconds
5/25 8th inning
Cristian Guzmán catches a Bengie Molina pop up
5.50 seconds
6/11 7th inning
Gabe Gross catches a Juan Uribe fly ball
5.07 seconds
5/27 1st inning
Josh Willingham catches a Pablo Sandoval line drive
3.31 seconds
Thanks…

to Sportvision for releasing the data and having the summit,

to Alan Nathan for organizing the talks,

and to the other presenters for their work and insights.