

What It Takes To Hit One Out

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Abstract

Since the origin of baseball in the 1840's players have been striving to hit it as hard and far as they can in order to achieve the lofty goal of hitting the ball out of the park. Typically the idea is that the harder one hits the ball the farther it will go. But then again, the angle that the ball is hit at also plays a dominant role in determining the distance a baseball can fly. However if the calculations stop here as they do in far too many calculations the data will be skewed. Factors such as aerodynamic drag, the Magnus effect, as well as elevation also affect the ball quite substantially. This research paper displays the wide range of error that exists between the distance a baseball can travel in reality and the distance it can theoretically travel if only the force of gravity is calculated.