

The Importance of Accuracy in Disc Golf

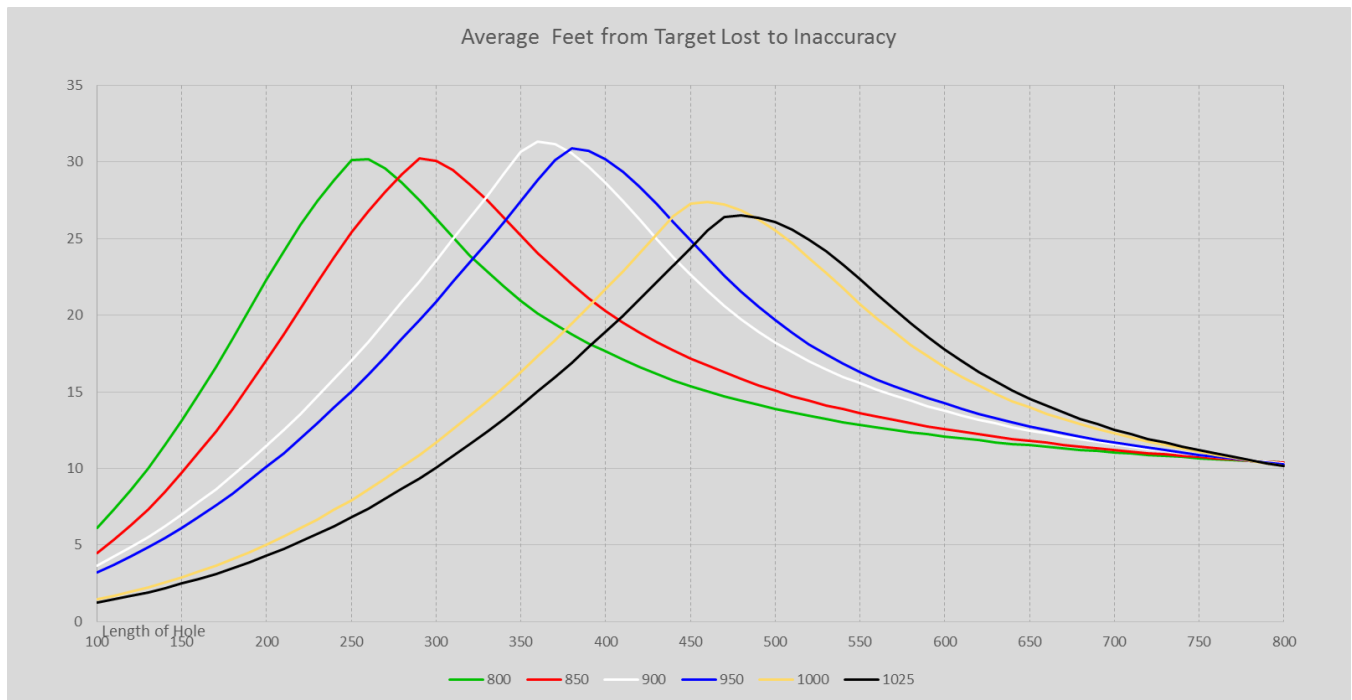
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The question is: Are there certain holes lengths that are better tests of the accuracy of disc golfers?

To answer this, I used the Throw Simulator. The Throw Simulator works by randomly choosing a length of throw and an accuracy from two distributions.

Selecting randomly from the distributions for length and accuracy, I computed the distance from the target for a simulated throw. I then compared to the distance if the player had thrown with mid-point accuracy. The difference is the effect of inaccuracy. The average distance off is shown in the chart below.



As expected, the effect of inaccuracy increases as hole length increases. If you throw 10 degrees off-line, that will have a bigger effect when you throw farther.

However, as the length of the hole exceeds the maximum length of throw for a player, the accuracy matters less and less.

The reason is the Pythagorean theorem; When the target is still very far away after the first throw, a change of 30 feet right or left just doesn't change the remaining distance to the target very much.