

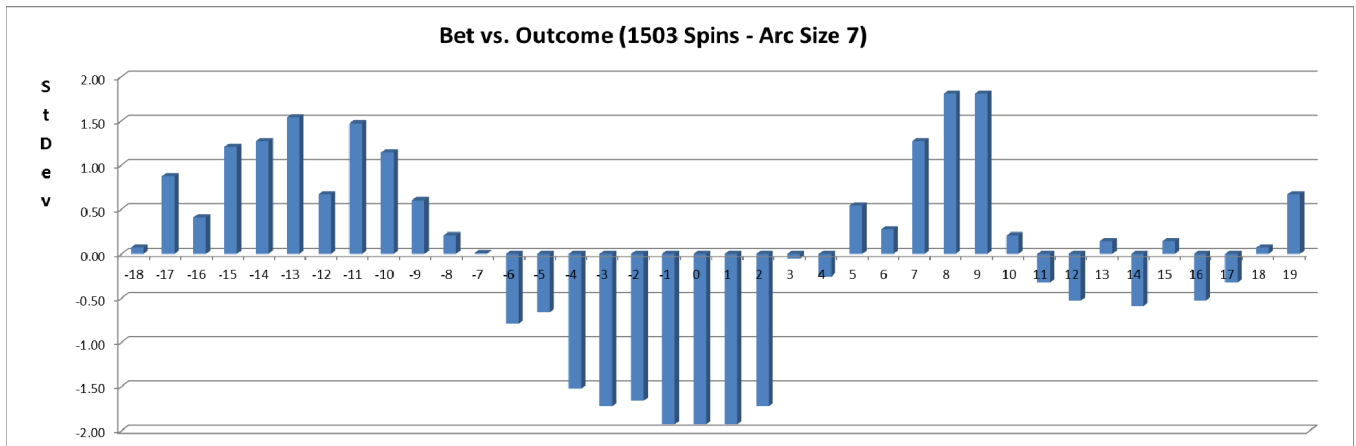
Response to Response by Mr. S. on the Organic Roulette Experiment

by

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This document is meant as a follow up to the document titled "Another perspective on the Interblock experiment results" by Mr. S, which was a response to a page I wrote about an experiment to test Organic Roulette machines for bias.

In the document by Mr. S, he correctly explains that a technique to smooth out the data is to look at all 38 seven-number arcs. To illustrate the results of the combined two experiments conducted, he includes the following graph.

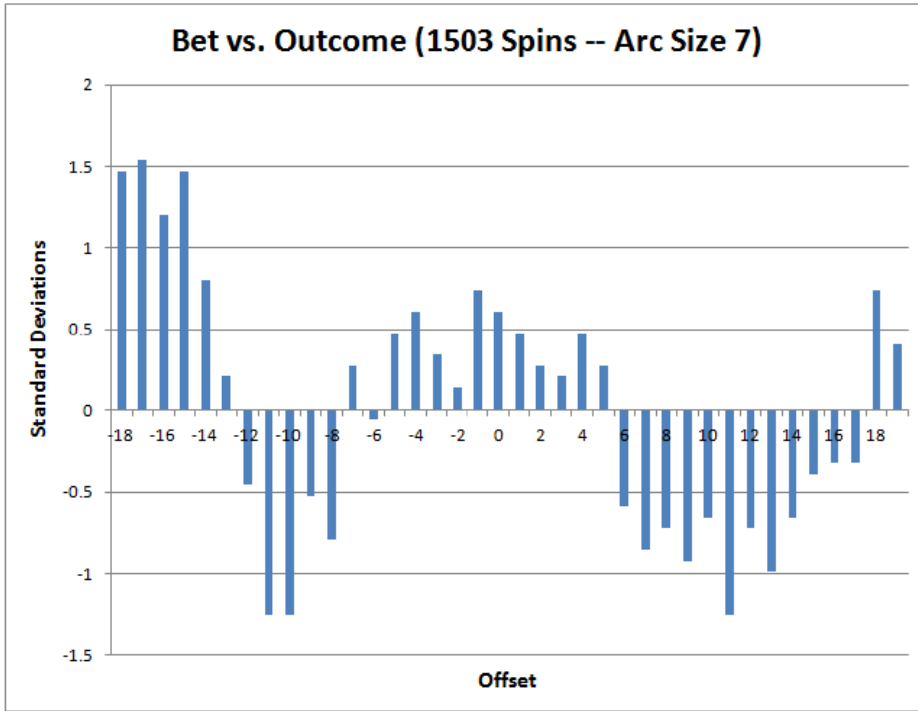


Along the horizontal axis is the center of the seven-number arc, as measured by its distance from the center of the arc actually bet. For example, -5 would be the arc centered 5 pockets to the left. +13 would be 13 pockets to the right. The left axis shows the number of standard deviations above or below expectations. For 1503 spins on a bet with a fair probability of winning of $7/38$, one standard deviation is 15.03.

As you can see, his graph shows a shortage compared to expectations greatest near the point we actually bet. It shows a surplus above expectations on either side of the shortage near the arc actually bet.

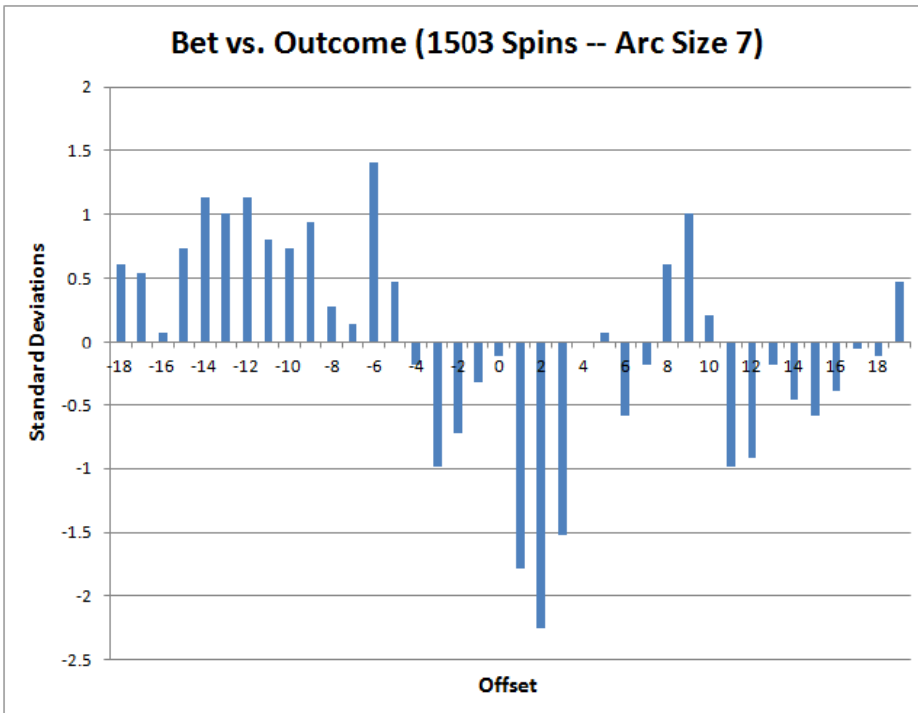
However, this saddle graph may make the results look more suspicious than they really are. As a basis of comparison, I redid the same test ten times, with random roulette outcomes. Note how graphs 1, 5, 6, 7, and 10 follow a similar sine wave shape. Granted Mr. S's chart bottoms out around an offset of 0, while mine bottoms out at random offsets.

Graph 1



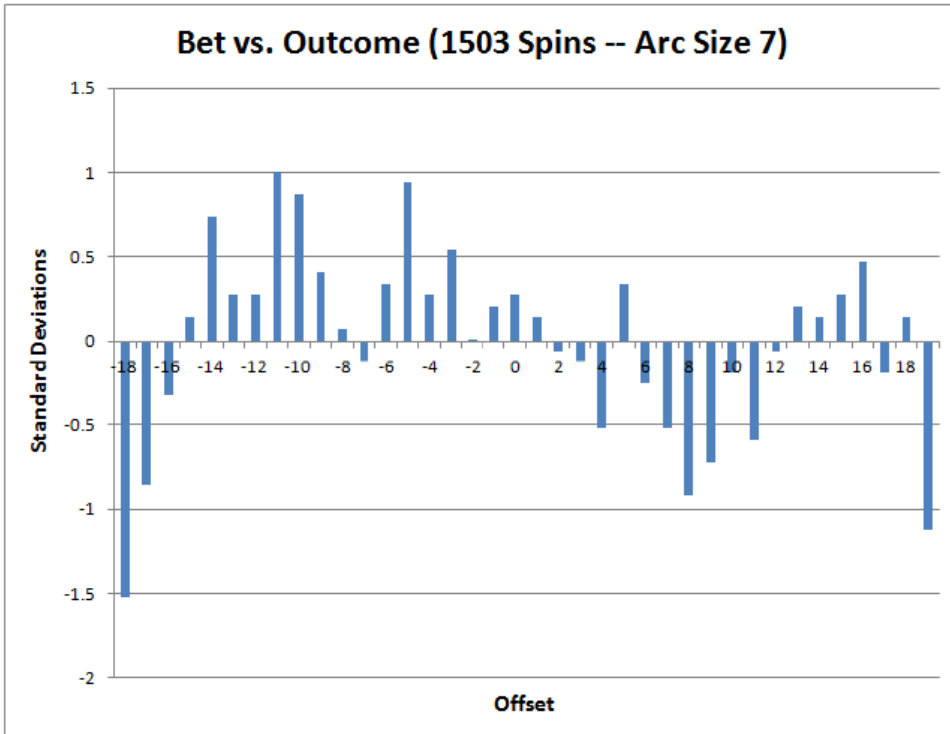
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Graph 2



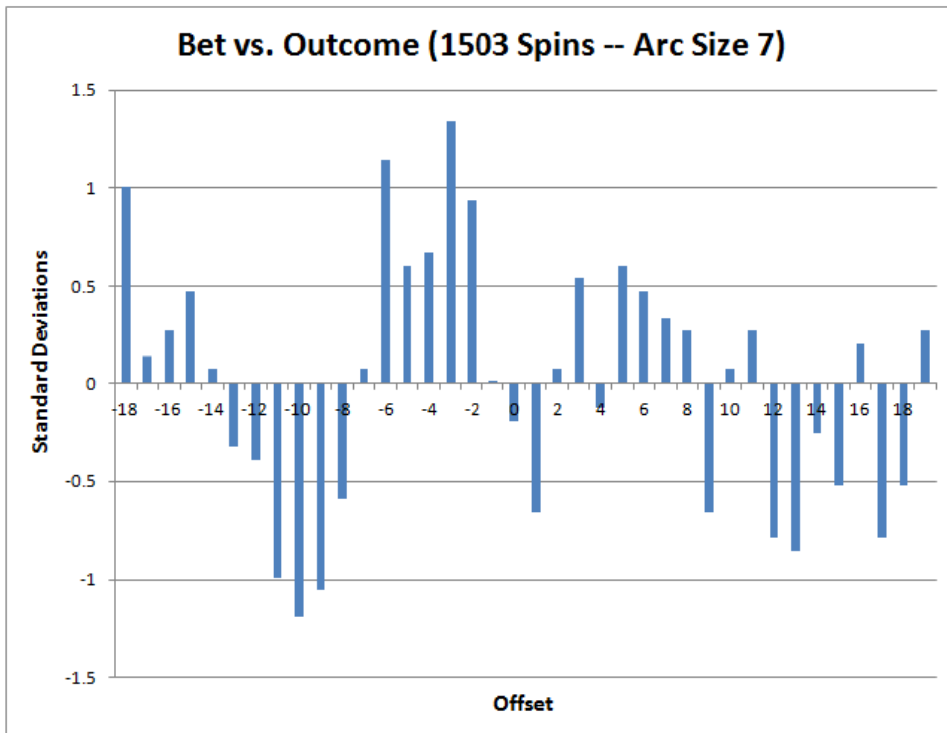
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Graph 3



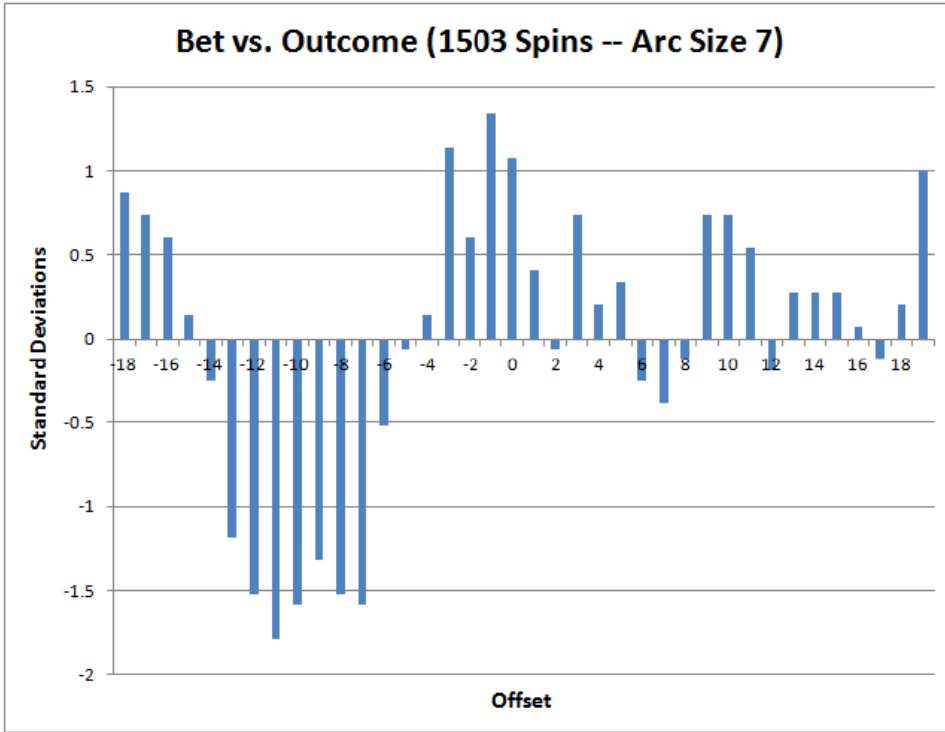
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Graph 4



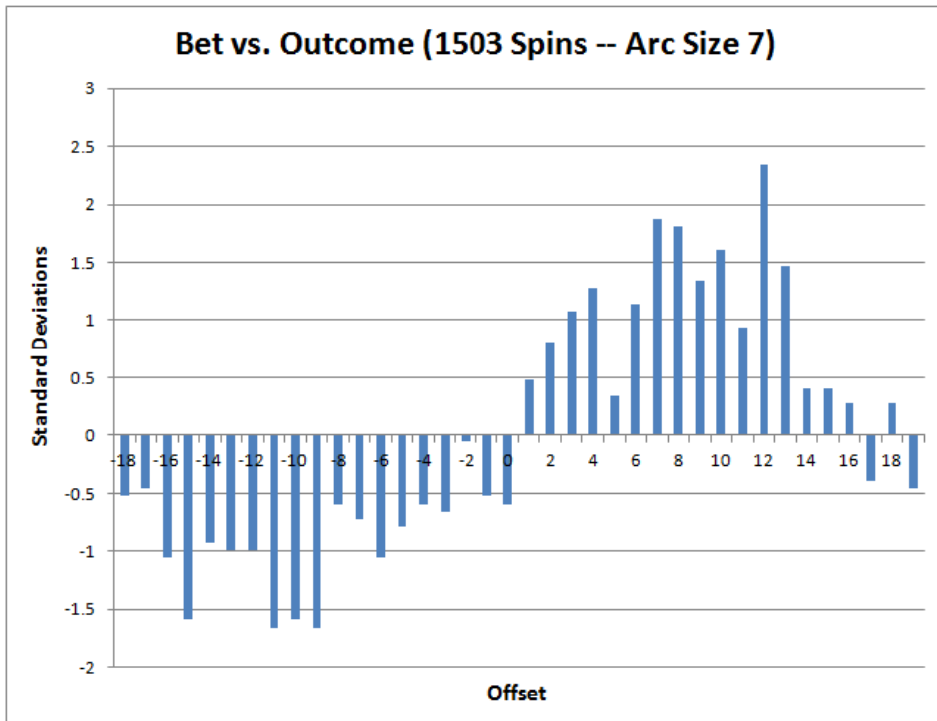
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Graph 5



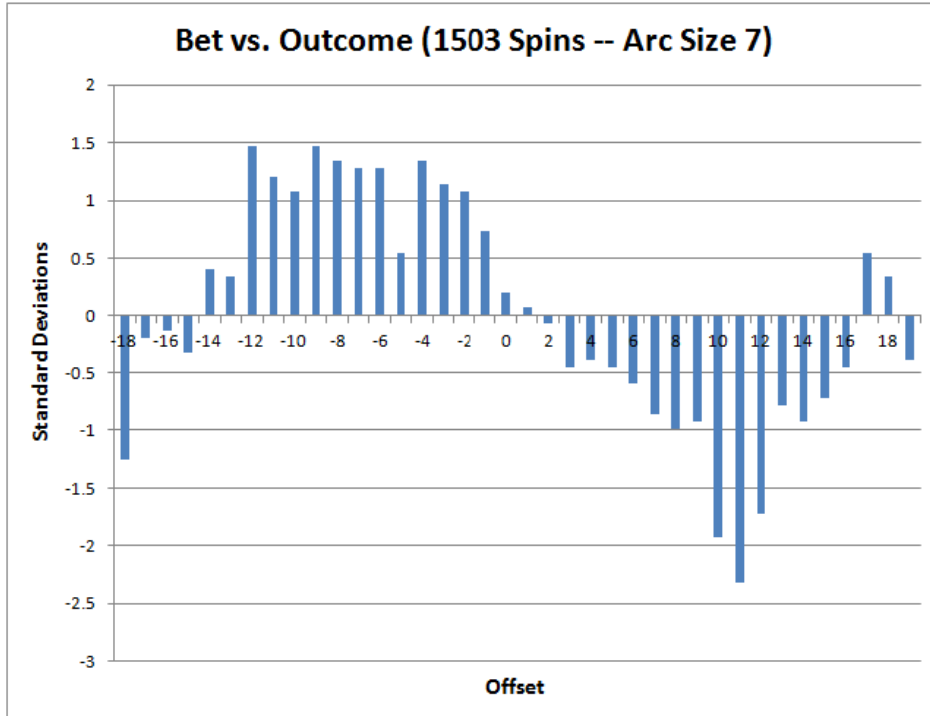
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Graph 6



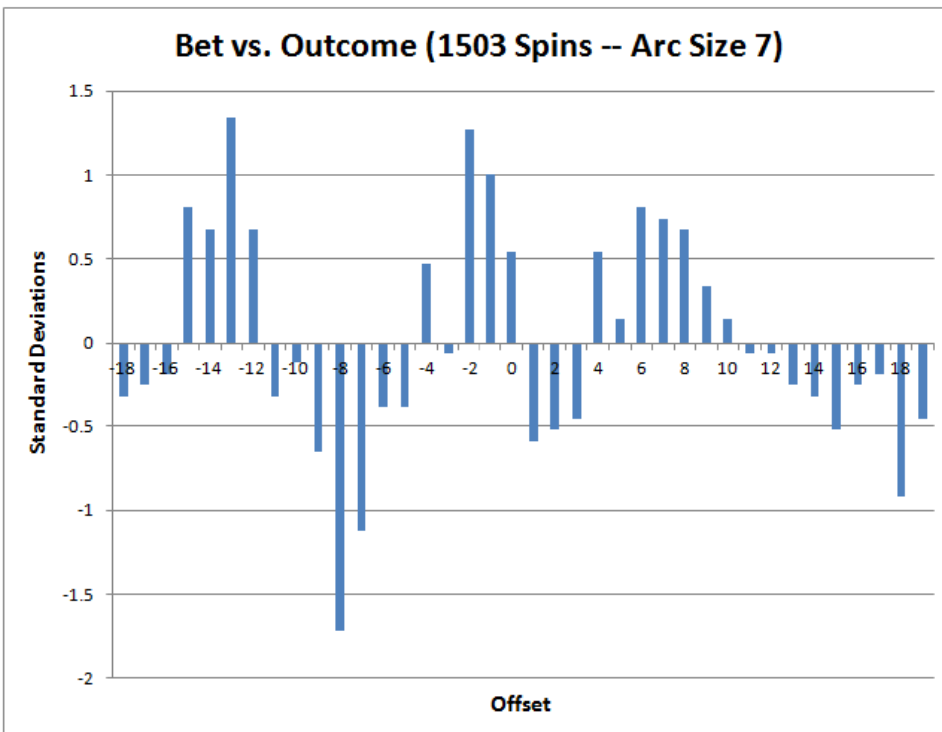
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Graph 7



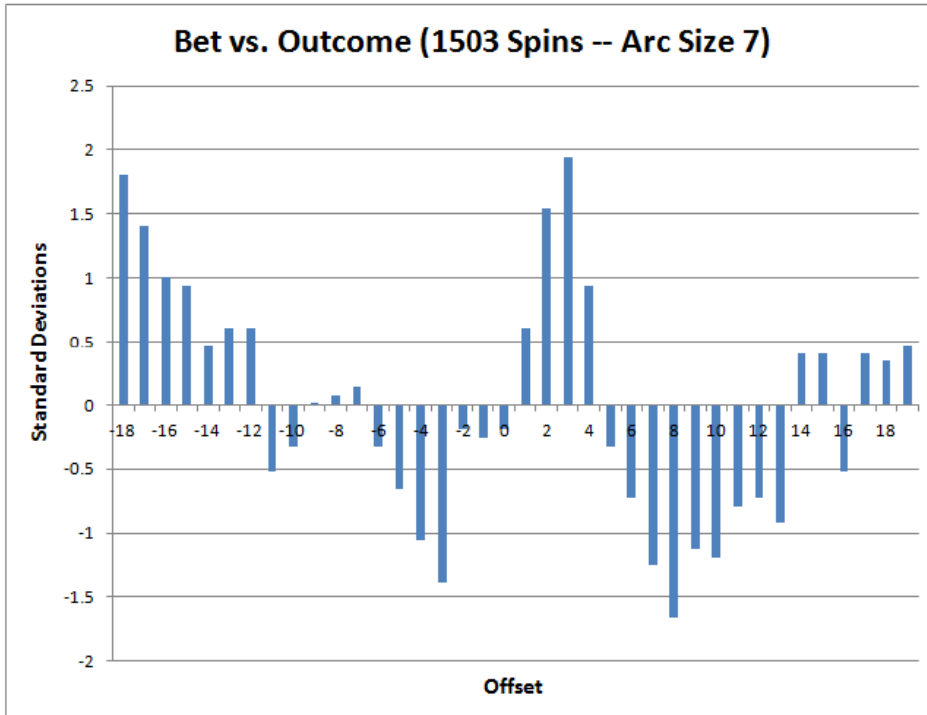
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Graph 8



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Graph 9



Graph 10

