Stephen A. Krevisky (skrevisky@mxcc.commnet.edu), Middlesex Community College, 100 Training Hill Road, Middletown, CT 06457. Using Z scores to analyze the prime-time sluggers. Preliminary report.

It has always been fascinating for baseball fans to argue over who are the top baseball sluggers of all time. It’s complicated by the notion that it’s hard to compare batters across eras, as the conditions of the game have changed so drastically! In this presentation, we suggest a methodology for comparing the top sluggers, which can help deal with the above-mentioned issues. We will use Z SCORES, in order to analyze how the top sluggers fared. We computed the MEAN AND STANDARD DEVIATION for all of these players. We were then able to compute the z score for the top SLA, which thus told us how many standard deviations above the league average the player’s SLA was. Next, we compare the Z scores of the top SLA’s across the different eras to see how different batters compare. We also rank them based on the highest z scores (high to low), as well as chronologically. This can help to tell who the top prime-time sluggers were. We note that a batter could hit many home-runs, but not have high slugging averages, and also that a batter could hit many doubles and triples, while not hitting many home runs, yet have a decent SLA. Finally, we summarize our findings, and suggest ways of improving the analysis. (Received September 27, 2004)