Computing The Simulator Solution Summary Statistics

Mean

The mean or arithmetic average is found according to:

$$\overline{Y} = \frac{1}{n}\sum_{i=1}^{n} Y_i$$

Batches from 1999 to 05027 use all available digits and do not round. Batches from 05028 round the mean to four decimal places.

Standard Deviation

The standard deviation is found according to:

$$SD = \sqrt{\frac{\sum_{i=1}^{n}\left(X_i - \overline{X}\right)^2}{n-1}}$$

The sample mean $\left(\overline{X}\right)$ uses all available digits. The standard deviation is rounded to five decimal places.

Relative Standard Deviation (Coefficient of Variation)

The relative standard deviation (CV) is found according to the following where the standard deviation has the full number of decimal places allowed in Microsoft Excel 2003:

$$\%CV = \left[\frac{SD}{\overline{Y}}\right] \bullet 100$$

The relative standard deviation is rounded to four decimal places