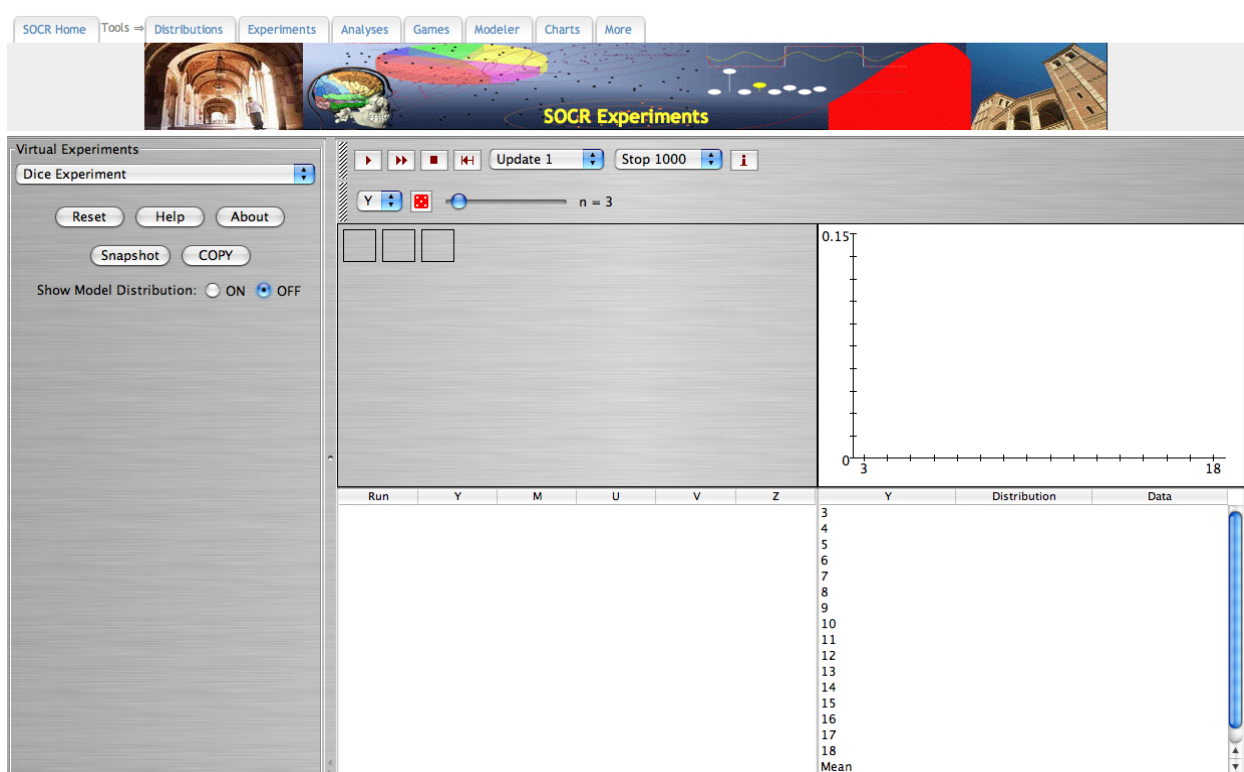


Dice experiment

Please access the Dice Experiment in SOCR (see snapshot below):



Select  $n = 3$  fair dice.

- Construct (by hand) the probability distribution of the sum ( $Y$ ) of the three dice. Run the experiment 1000 times to verify your answer.
- Construct (by hand) the probability distribution of the maximum ( $V$ ) of the three dice. Compute the mean and standard deviation of  $V$  and verify your answer from the applet. Run the experiment 1000 times to see that the empirical distribution is very close to the theoretical distribution of  $V$ .