

Monte Carlo Project Map

This guide is broken down into logical section. Each section is designed to help you understand and run the code illustrated in this VBA project.

Modules

There are three modules in this VBA project each containing different sets of macros and codes.

Module 1 contains two macros.

MonteCarlo Macro with keyboard shortcut: Ctrl + m. This macro is used to input values and prepare the excel MonteCarloSimulation sheet.

MonteCarloSimulation Macro with keyboard shortcut: Ctrl + e. This is the macro used to run the Monte Carlo Simulation for different runs and/or iterations. To run an iteration, click the “Run Iteration” button located in the MonteCarloSimulation sheet. An InputBox comes up where user can input the number of iterations to be run. Click OK or press enter and watch the simulation run.

Module 2 contains one macro.

Reservoir_Parameter_data Macro with keyboard shortcut: Ctrl + r. This macro was used to create data for the ReservoirEstimation Parameter sheet. The graph for the Triangular and Uniform distribution are plotted in the ReservoirEstimation Parameter sheet.

Module 3 contains one macro.

Generate_Plot_percentiles Macro with keyboard shortcut: Ctrl + p. This macro generates plots for each distribution and the percentiles for the given data.

Comments

Comments are visible throughout the code to give the user an understanding of what is going on behind the scene. Text containing a comment are preceded with an apostrophe and Excel VBA colors the line green to indicate that it is a comment. Comments are also used in the code to describe the code section.

Note...

You may notice occasional line breaks in the code due to layout constraints. All line breaks are documented with the standard “_” in the sample code.

Negative numbers cannot be run on the iteration. The iteration automatically aborts when a negative number is run.