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| Assessment Tool |  | Robert.F.Schneider@jpl.nasa.gov |
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| What is it? This is an application used to estimate required margins for a given confidence level. The user can input risk data manually, or import previously written data into the application. The application uses the Monte Carlo approach to evaluate each value of data in order to generate a histogram of possible outcomes and a cumulative PDF. The application then computes and displays margins for several confidence levels How do I install it? To install the application, receive the most recent version from Robert Schneider, and follow these directions.  This application was developed using MATLAB, so if you have MATLAB installed on your computer already, then all you need to do if copy over the files\_only to your computer, and run.  If you **do not** have MATLAB installed, then you will have to install from the redistribution file. This will also install a MATLAB compiler runtime that is required to run the program. Simply click on the Installer, and follow the directions to install the application. How does it work  1. Run the application 2. Select Input Manually or Import from file. 3. If you Input Manually, it will take you to a screen where you input fixed units for each phase, and a range of upper and lower bound for the uncertainty. Each PDF is initially set to Uniform Distribution. 4. If you select Import from file, you will be directed to a Format screen where you can preview your data, and select what rows and columns you wish to evaluate. For this function, Excel spreadsheets work best. If your data has some special form or layout that doesn’t seem to work, please contact Robert Schneider to see if you can get your format working correctly.  Questions? Implementation requests? If you have questions about the application, how to use it, or you want to report an issue, please contact Robert.F.Schneider@jpl.nasa.gov  If you would like to see something be added to the program, please don’t hesitate to ask! |  | Types of Probability (PDF) **Uniform Distribution** is represented by a numeric value of 1, where there is equal chance for any value to be selected between the two bounds.  **Triangular Distribution** is represented by a numeric value of 2, where the peak probability value of the triangle is in the middle between the two bounds. |