

Contingency

In the Contingency view, you can specify the default contingency settings and fractile set used to analyze simulation results.

The “Calculate contingency w.r.t.” popup menu is used to control the default contingency reference, i.e., which statistic contingencies will be calculated with respect to. DynRisk offers three possible reference statistics:

- Base value
- Mean value
- 50/50-value

The “Base value” is the value of the total cost if all uncertainty is neglected. The “Mean value” is obtained by calculating the mean of all the simulation values. The “50/50-value” is the same as the median of the simulation values.

The “Calculate contingency as” popup menu is used to control the default contingency format. DynRisk offers three alternatives:

- %
- % difference
- Difference

If X denotes the contingency reference statistic, and Y is the difference between a contingency level statistics and X, then the different options can be explained as follows:

If you choose the “%” option the contingencies will be calculated as:

$$\text{Contingency} = 100 (X+Y)/X$$

If you choose the “% difference” option the contingencies will be calculated as:

$$\text{Contingency} = 100 Y/X$$

If you choose the “Difference” option the contingencies will be calculated as:

$$\text{Contingency} = Y$$

The “Contingency levels” popup menu is used to control the default levels of contingency DynRisk will display. You can choose between two different types of levels:

- Fractiles
- Mean \pm st.dev

If you choose the “Fractiles” option, the contingency levels will be calculated according to the current fractile set. Thus, if e.g., this fractile set is “10%, 50%, 90%”, then contingency levels will be calculated as the 10%-, 50%-, and 90%-fractiles of the total cost “data node”.

If you choose the “Mean \pm st.dev” option, the three contingency levels will be (“Mean” - “st.dev”), “Mean”, and (“Mean” + “st.dev”). Here “Mean” is the mean of the simulated values, and “st.dev” is the standard deviation of the simulated values.

The “Fractiles” popup menu is used to select a default fractile set.

A fractile set consists of three fractiles, e.g., 5%, 50% and 95%, and is used in tables, plot legends, contingency calculations etc.

Note that you can always change the contingency settings used in a particular data file by using the “Contingency...” command in the “Set” submenu of the “Gallery” menu. Similarly, you can change the fractile set by using the “Fractiles...” command in the “Set” submenu of the “Gallery” menu.