# Slope

The slope of the regression line expressing the linear relation between the current data node and the "goal node" of the simulation. This attribute is only available if you have selected a particular goal node for the simulation, and run a criticality simulation. You can, however, compute the slope for any arbitrary pair of data nodes by making a regression line plot for the pair. This is done by using the "Regression line" command in the "Gallery" menu.

## Intercept

The intercept of the regression line expressing the linear relation between the current data node and the "goal node" of the simulation. This attribute is only available if you have selected a particular goal node for the simulation, and run a criticality simulation. You can, however, compute the intercept for any arbitrary pair of data nodes by making a regression line plot for the pair. This is done by using the "Regression line" command in the "Gallery" menu.

#### Covar.

The covariance between the current data node and the "goal node" of the simulation. This attribute is only available if you have selected a particular goal node for the simulation, and run a criticality simulation. You can, however, compute the covariance between any arbitrary pair of data nodes by making a regression line plot for the pair. This is done by using the "Regression line" command in the "Gallery" menu.

### Correl.

The correlation between the current data node and the "goal node" of the simulation. This attribute is only available if you have selected a particular goal node for the simulation, and run a criticality simulation. You can, however, compute the correlation between any arbitrary pair of data nodes by making a regression line plot for the pair. This is done by using the "Regression line" command in the "Gallery" menu.

#### Cr.mean

The criticality mean of the current data node with respect to the "goal node". The criticality mean is calculated by using the following formula:

$$[M(G) - M(G | X = M(X))]/M(G)$$

where G is the goal node, X is the current node, M(G) and M(X) denotes the

mean values of G and X respectively, and  $M(G \mid X = M(X))$  denotes the conditional mean of G given that X is equal to its mean value. Thus, the criticality mean measures the effect of the uncertainty in X on the mean value of the goal node. [All mean values are estimated based the current simulation data.]

This attribute is only available if you have selected a particular goal node for the simulation, and run a criticality simulation. Moreover, the attribute is only available for a data node if the "Crit." attribute of the corresponding model node were checked during the simulation.

### Cr.var.

The criticality variance of the current data node with respect to the "goal node". The criticality variance is calculated by using the following formula:

$$[V(G) - V(G \mid X = M(X))]/V(G)$$

where G is the goal node, X is the current node, V(G) and V(X) denotes the variance values of G and X respectively, and  $V(G \mid X = M(X))$  denotes the conditional variance of G given that X is equal to its mean value. Thus, the criticality variance measures the effect of the uncertainty in X on the variance of the goal node. [All variance values are estimated based on the current simulation data.]

This attribute is only available if you have selected a particular goal node for the simulation, and run a criticality simulation. Moreover, the attribute is only available for a data node if the "Crit." attribute of the corresponding model node were checked during the simulation.

### Sn.mean

The sensitivity mean of the current data node with respect to the "goal node". The sensitivity mean is calculated by using the following formula:

$$[M(G \mid S*X) - M(G)]/M(G)$$

where G is the goal node, X is the current node, S is the specified sensitivity factor, M(G) and M(X) denotes the mean values of G and X respectively, and  $M(G \mid S*X)$  denotes the conditional mean of G given that X is replaced by S\*X in all calculations. Thus, the sensitivity mean measures the effect of a change in X on the mean value of the goal node. [All mean values are estimated based the current simulation data.]

This attribute is only available if you have selected a particular goal node for the simulation, and run a criticality simulation. Moreover, the attribute is only available for a data node if the "Sens." attribute of the corresponding model node were checked during the simulation.

## Sn.var.

The sensitivity variance of the current data node with respect to the "goal node". The sensitivity variance is calculated by using the following formula:

## $[V(G \mid S*X) - V(G)]/V(G)$

where G is the goal node, X is the current node, S is the specified sensitivity factor, V(G) and V(X) denotes the variance values of G and X respectively, and  $V(G \mid S*X)$  denotes the conditional variance of G given that X is replaced by S\*X in all calculations. Thus, the sensitivity variance measures the effect of a change in X on the variance value of the goal node. [All variance values are estimated based the current simulation data.]

This attribute is only available if you have selected a particular goal node for the simulation, and run a criticality simulation. Moreover, the attribute is only available for a data node if the "Sens." attribute of the corresponding model node were checked during the simulation.

### Lo.fract.

The lower fractile value of the data node. Which fractile depends on the chosen fractile set. To choose a particular fractile set, you use the "Fractiles..." command in the "Set" submenu of the "Gallery" menu. If e.g., the 10% fractile is chosen as the lower fractile, the "Lo.fract." attribute is such that 10% of the result values for the data node is less than this value, and 90% is greater than this value.

### Md.fract.

The medium fractile value of the data node. The medium fractile is always the 50% fractile. Thus, the "Md.fract." attribute is such that 50% of the result values for the data node is less than this value, and 50% is greater than this value.

### Hi.fract.

The higher fractile value of the data node. Which fractile depends on the chosen fractile set. To choose a particular fractile set, you use the "Fractiles..." command in the "Set" submenu of the "Gallery" menu. If e.g.,

the 90% fractile is chosen as the higher fractile, the "Hi.fract." attribute is such that 90% of the result values for the data node is less than this value, and 10% is greater than this value.

Lo.cont.

The lower contingency value of the data node. The rules for calculating contingencies depend on the chosen contingency settings. To change these rules, you use the "Contingency..." command in the "Set" submenu of the "Gallery" menu. If e.g., you have chosen to calculate contingency with respect to base values, using "Mean  $\pm$  st.dev" as levels, and "%" as calculation method, the "Lo.cont." attribute is calculated according to the following formula:

100 \* [M(X) - SD(X)]/M(X)

Md.cont.

The medium contingency value of the data node. The rules for calculating contingencies depend on the chosen contingency settings. To change these rules, you use the "Contingency..." command in the "Set" submenu of the "Gallery" menu. If e.g., you have chosen to calculate contingency with respect to base values, using "Mean ± st.dev" as levels, and "%" as calculation method, the "Lo.cont." attribute is calculated according to the following formula:

100 \* M(X)/M(X) = 100

Thus, for this particular setting, the "Md.cont." attribute is always equal to 100%.

Hi.cont.

The higher contingency value of the data node. The rules for calculating contingencies depend on the chosen contingency settings. To change these rules, you use the "Contingency..." command in the "Set" submenu of the "Gallery" menu. If e.g., you have chosen to calculate contingency with respect to base values, using "Mean  $\pm$  st.dev" as levels, and "%" as calculation method, the "Lo.cont." attribute is calculated according to the following formula:

100 \* [M(X) + SD(X)]/M(X)