

Choosing a data node attribute

To choose the relevant data node attribute to be included in the model, you use the “Property” popup menu.

There are three different settings available:

- Determ. output
- Random output
- Ranked output

[Note that if you select one of the other menu items, DynRisk will automatically uncheck the “Data node” checkbox, since these attributes are available only for regular nodes.]

The “Determ. output” simply gives you the “Base value” attribute of the data node.

The “Random output” gives you a random sample drawn from the set of simulation values for the data node.

Note that if you, in your model, resample from several data nodes located in the same result file, it is important to preserve the correct dependence between these data nodes. DynRisk does this by making sure that within a simulation run on your current model, you always get resampled values from the data nodes which occurred in the same run in the original simulation, i.e., the simulation that produced the data nodes.

Note also that if you, in your model, resample from several data nodes located in different result files, DynRisk has no way of preserving any possible dependence between the data nodes. As a result, such data nodes would be treated as if they were completely independent. Thus, unless you think that this is a realistic assumption, you should avoid mixing together data nodes from different files.

The “Ranked output” option is only of interest if you resample more than one data node in your model. Each event will then obtain a randomly sampled value from its corresponding data node. However, DynRisk will carry out the resampling on a ranked data set instead of the original set. Thus, if a large value is sampled for one of the data nodes, then the sampled values from the other data nodes will be large as well. Similarly, if a small value is sampled for one of the data nodes, then the sampled values from the other data nodes will be small as well.

This sampling method creates a very extreme kind of dependence, and should be used with caution. It is probably most useful in a sensitivity analysis where you want to find an upper bound on the effect of dependence.

Note that the “Ranked output” option works for data nodes in the same result file as well as data nodes located in different files.