
Toy Models for Visualization

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Abstract. This document describes a selection of manually-generated (potentially unrealistic) toy models for visualization.

Important Note

These models are a work in progress. I focused on creating a couple of very simple models for proofs-of-concept, and I will create more as time goes on.

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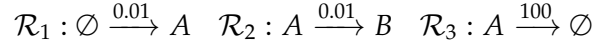
Rare Event Models

This section contains models designed to have rare events.

2D Model

This model contains two species, A and B , initialized: $A = 0 \quad B = 0$

This model contains three reactions, specified as follows:



The property in question is:

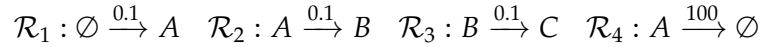
$$P_{=?}(\text{true } \mathcal{U}^{[0,5]} B \geq 20)$$

The specification files are found in `toy-models/rare-events/2d`.

3D Model

This model contains three species, A , B , and C initialized: $A = 0 \quad B = 0 \quad C = 0$

This model contains four reactions, specified as follows:



The property in question is:

$$P_{=?}(\text{true } \mathcal{U}^{[0,5]} C \geq 10)$$

The specification files are found in `toy-models/rare-events/3d`.

References