

---

# Toy Models for Visualization

*Landon Taylor | Compiled November 10, 2025*

---

**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.

## Contents

<b>Rare Event Models</b>	<b>2</b>
Low-Dimensionality Model . . . . .	2

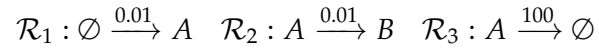
## Rare Event Models

This section contains models designed to have rare events.

### Low-Dimensionality 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/low-dimensionality`.

## References