

Supplementary Materials: New Statistical Models for Copolymerization

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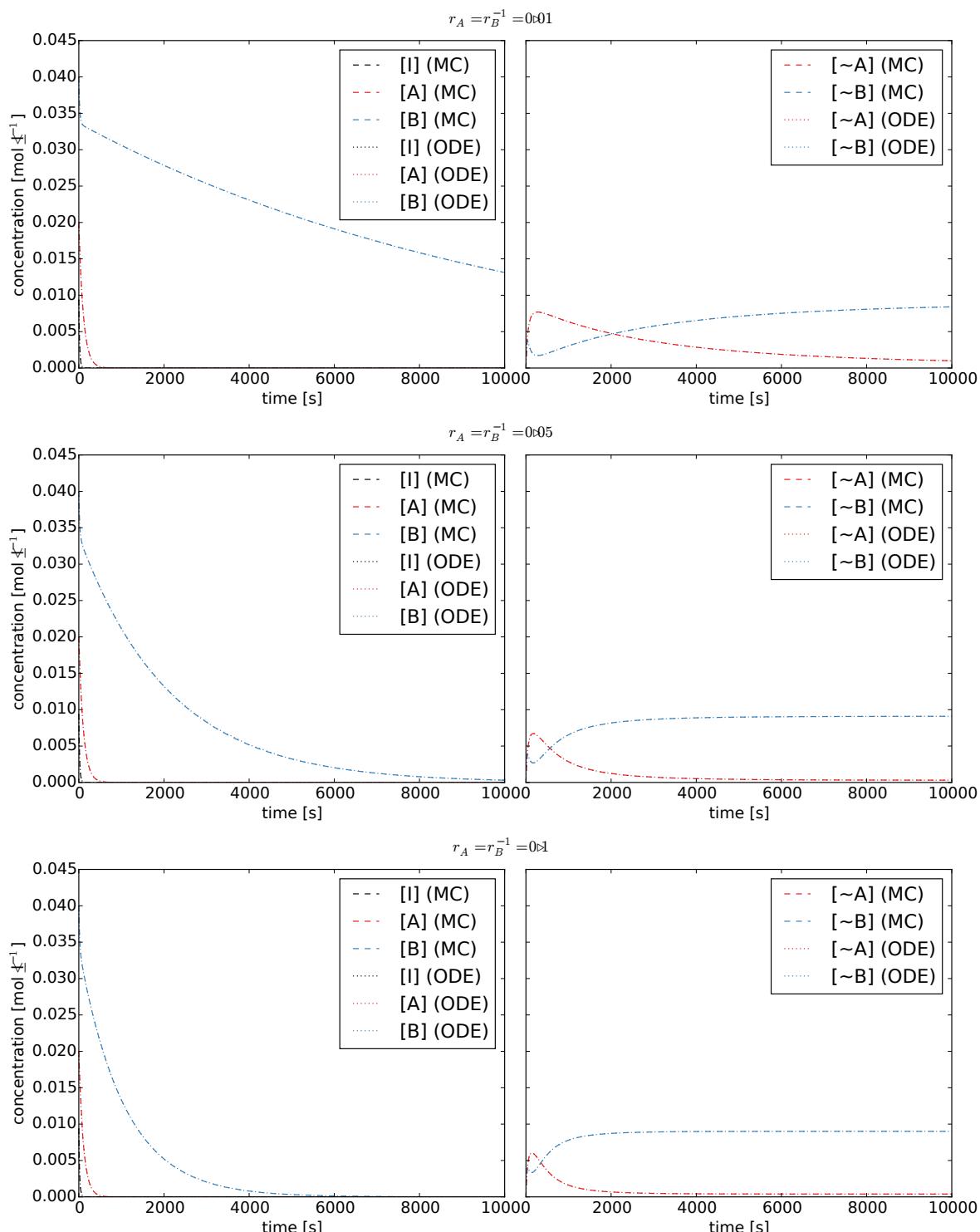
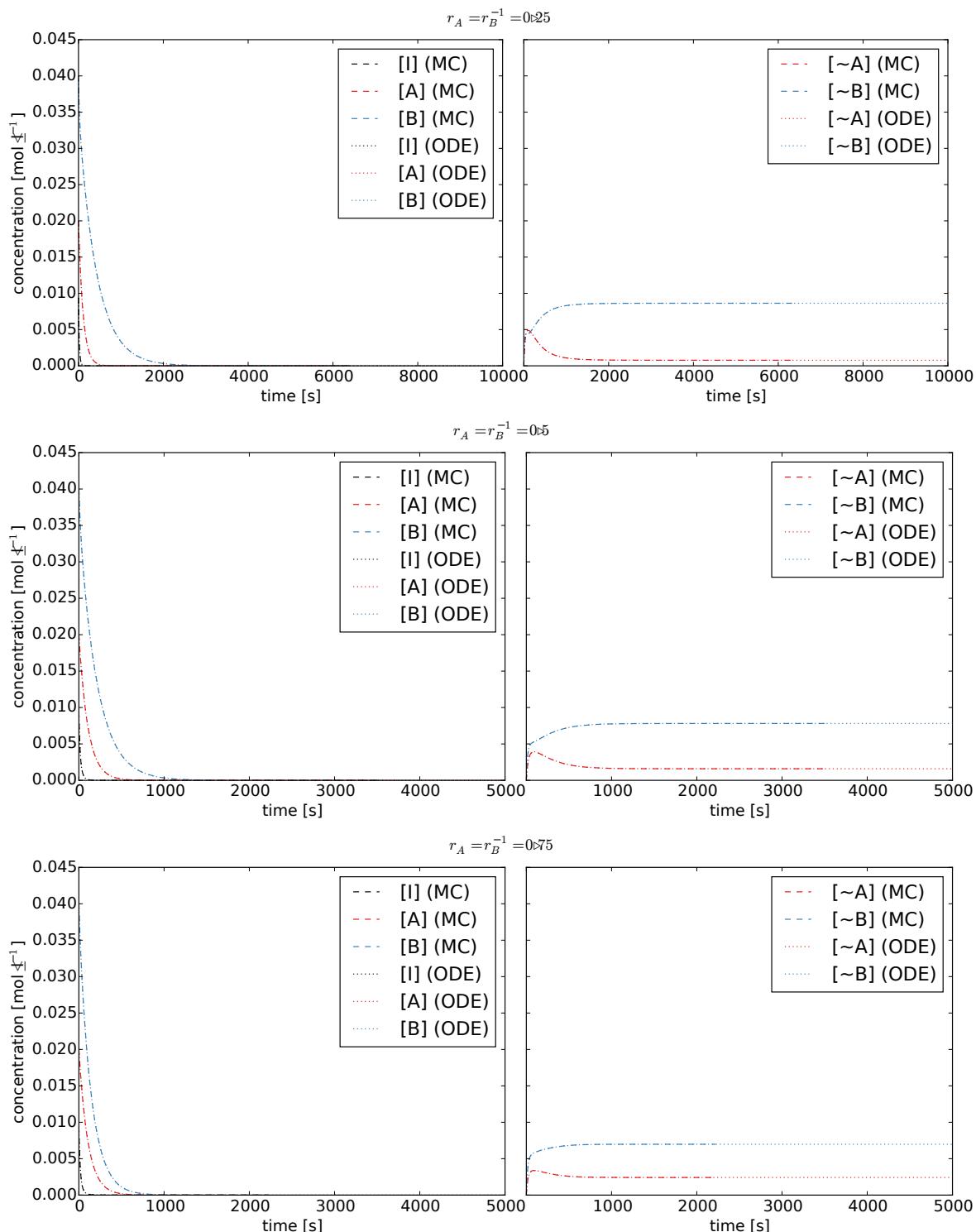
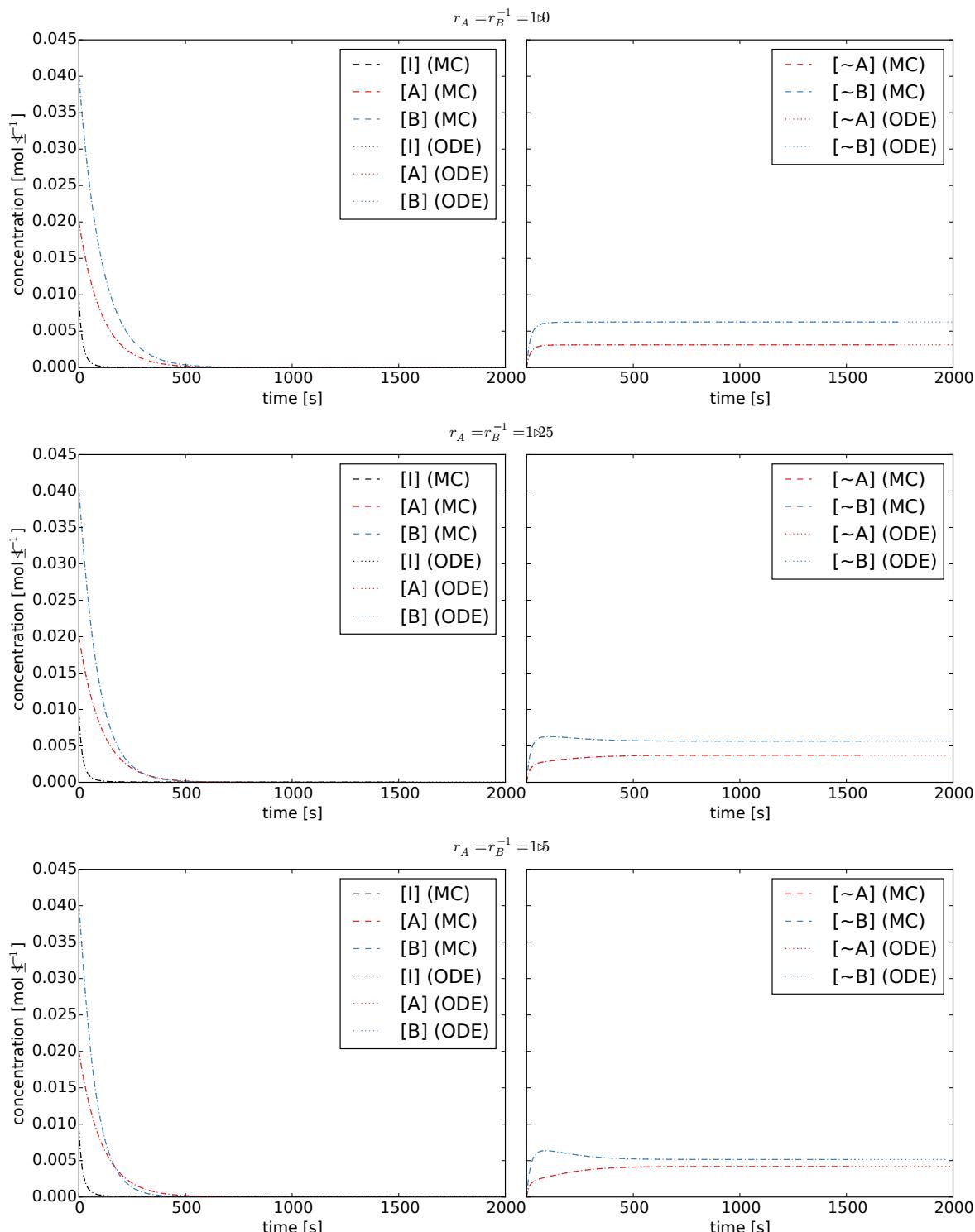


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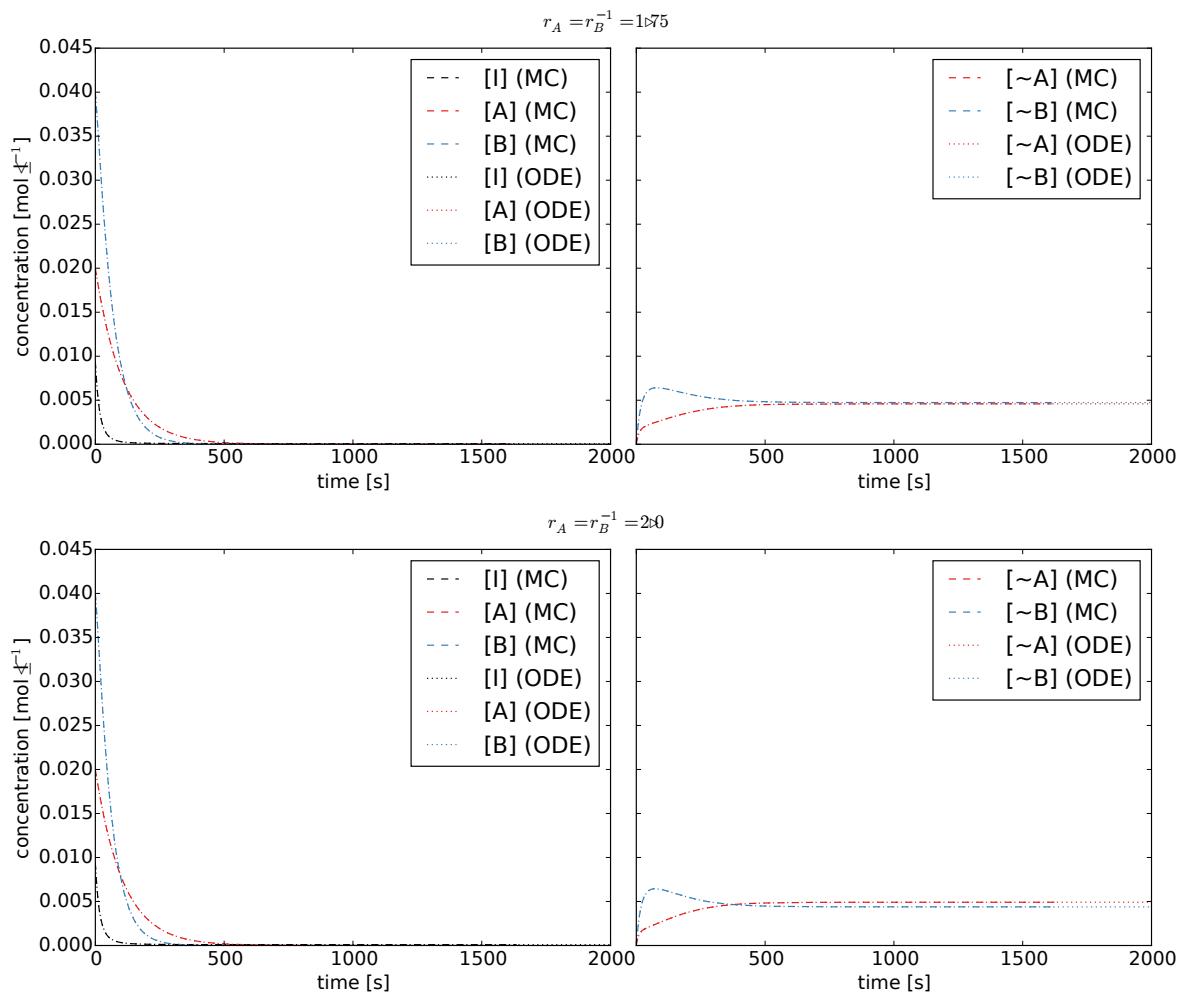
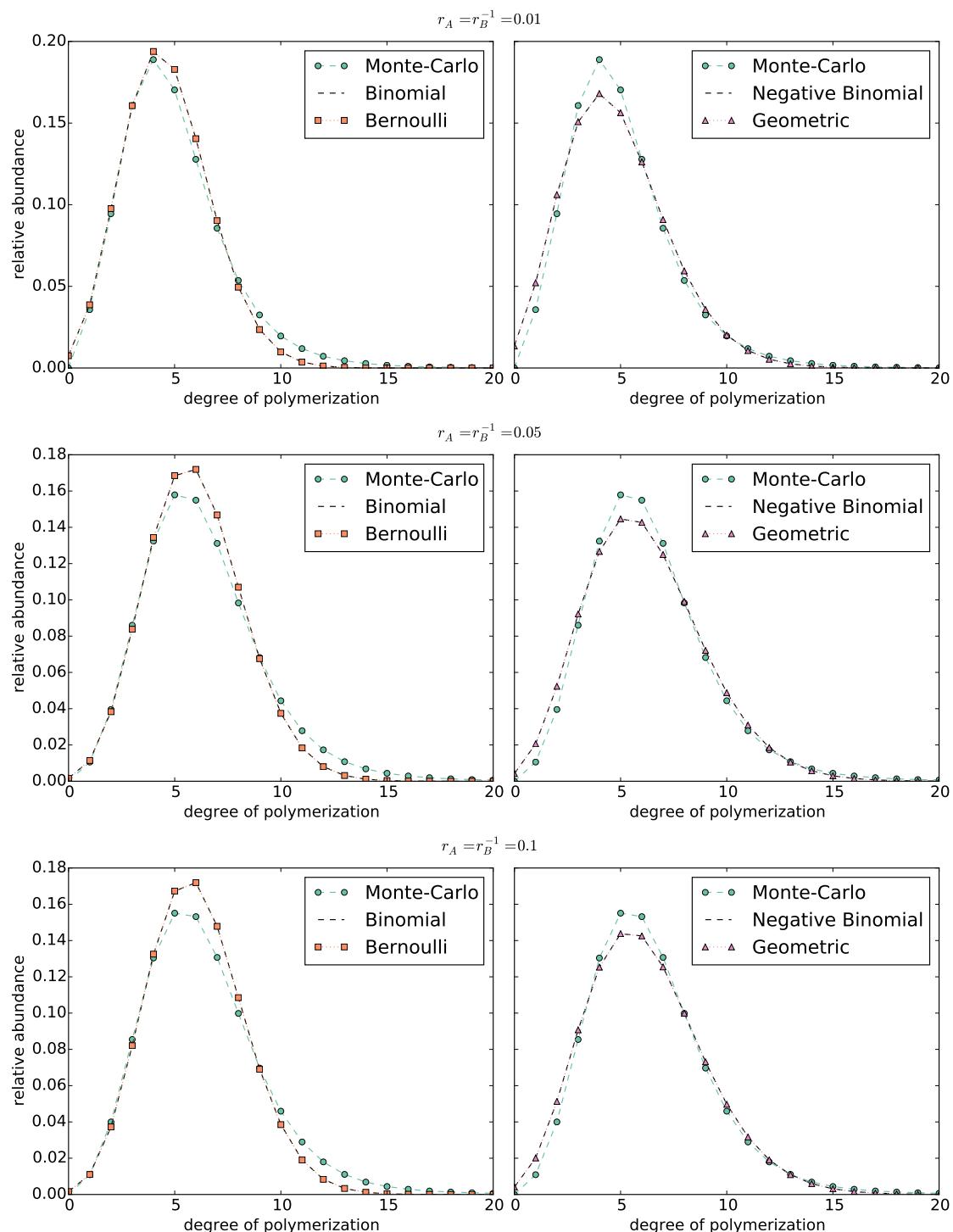
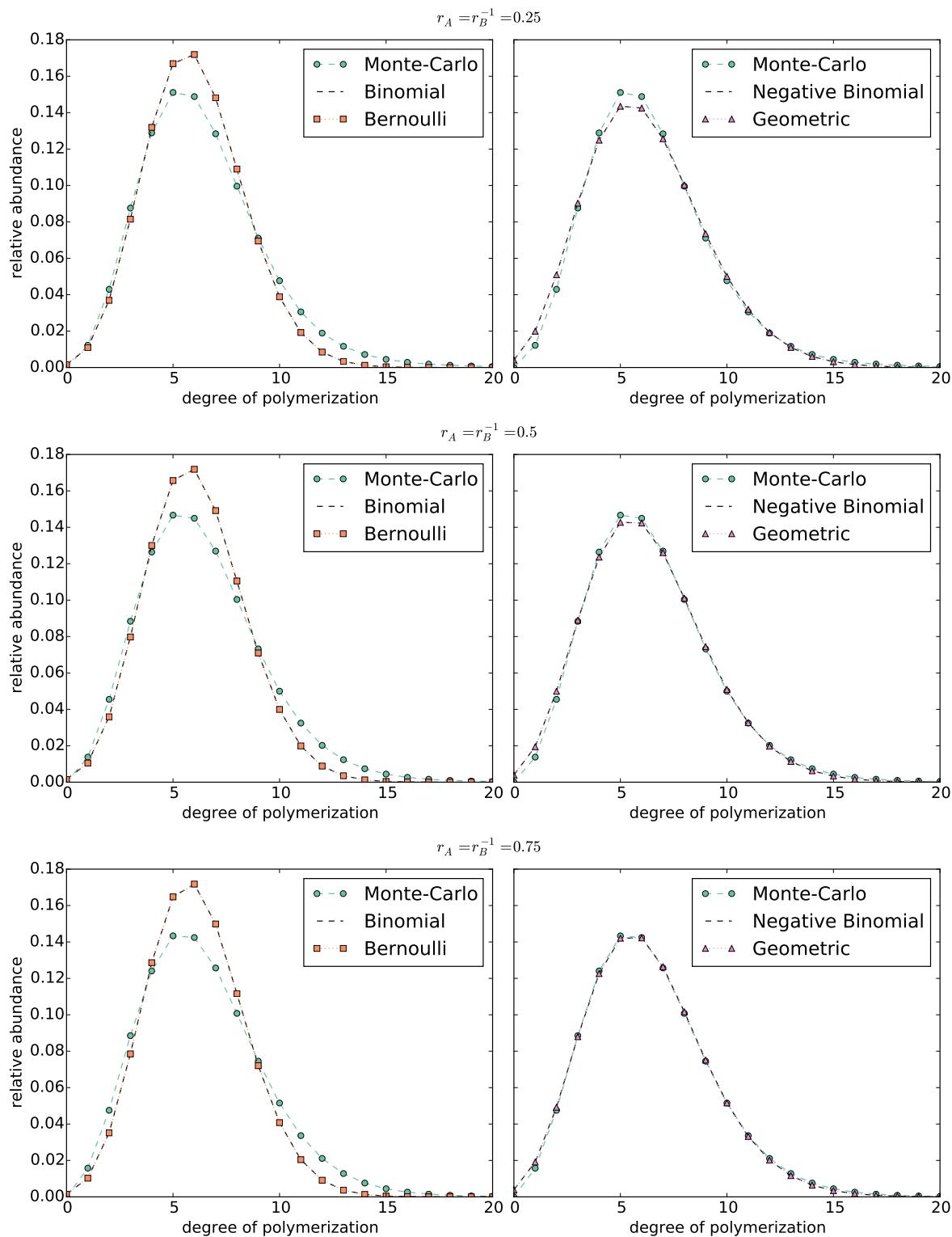
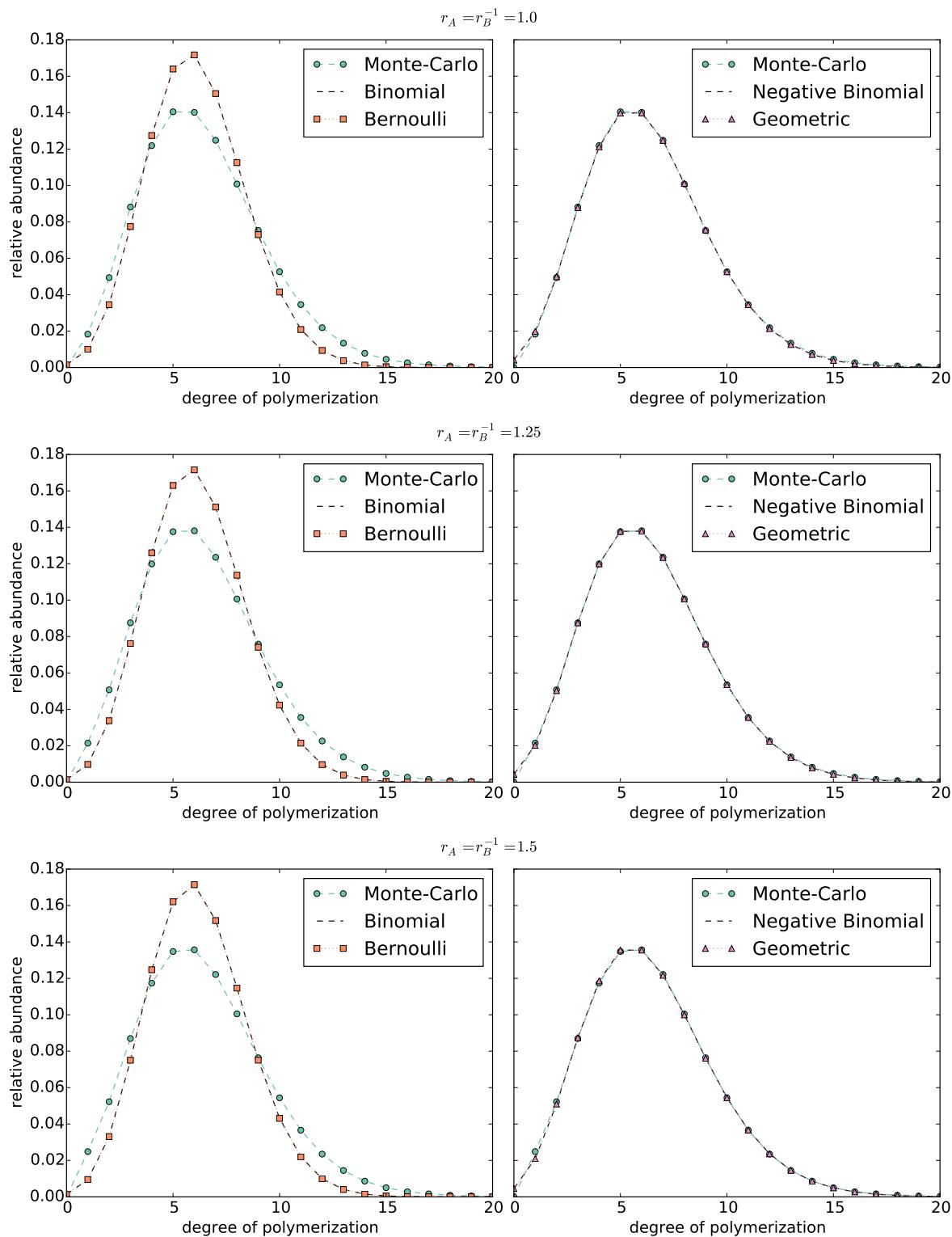


Figure S1. Reactant (left) and product (right) concentrations simulated by Monte-Carlo (MC) compared to the concentrations computed by solving the ordinary differential equation (ODE) model of the living copolymerization.

**Figure S2. Cont.**

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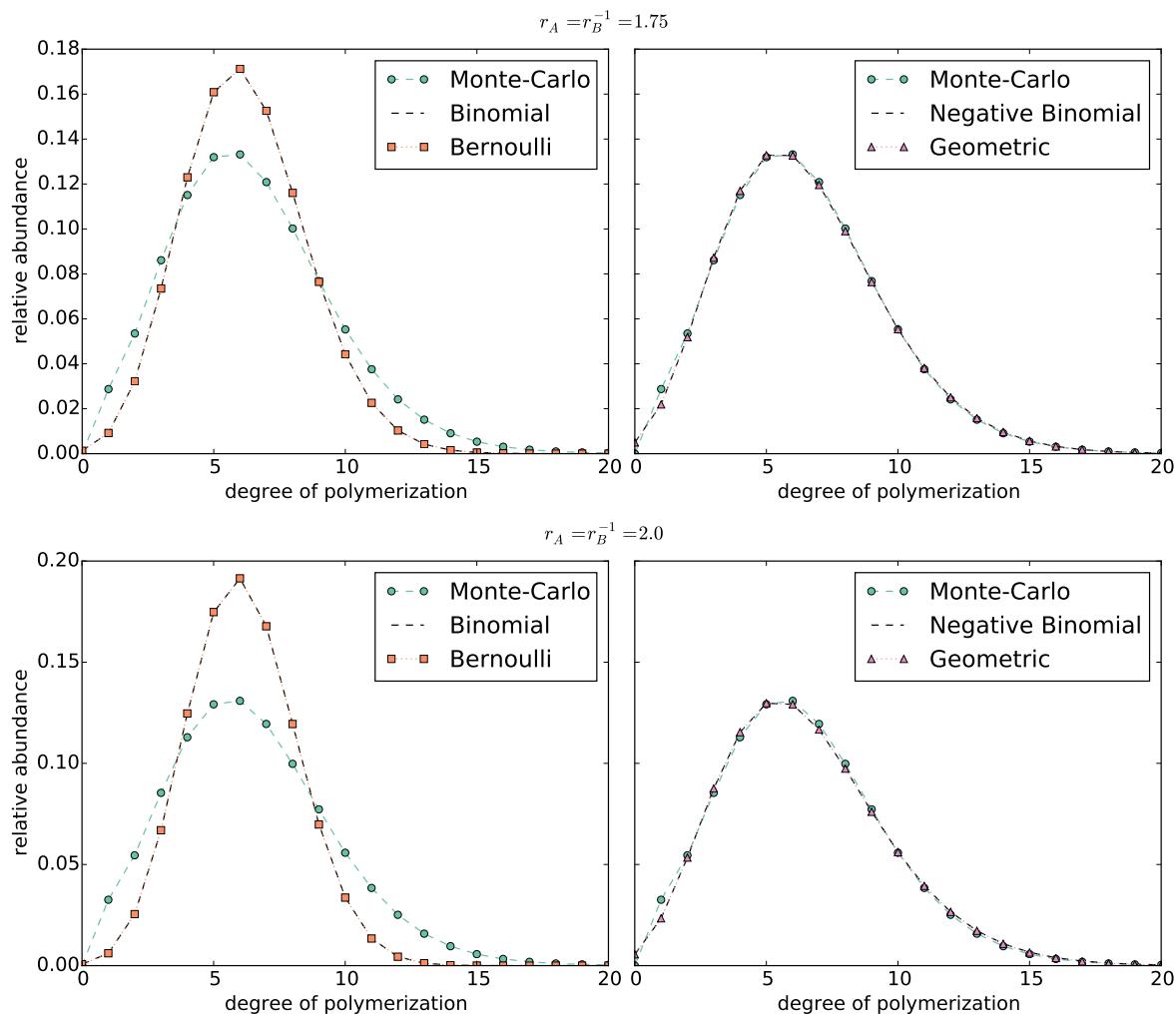
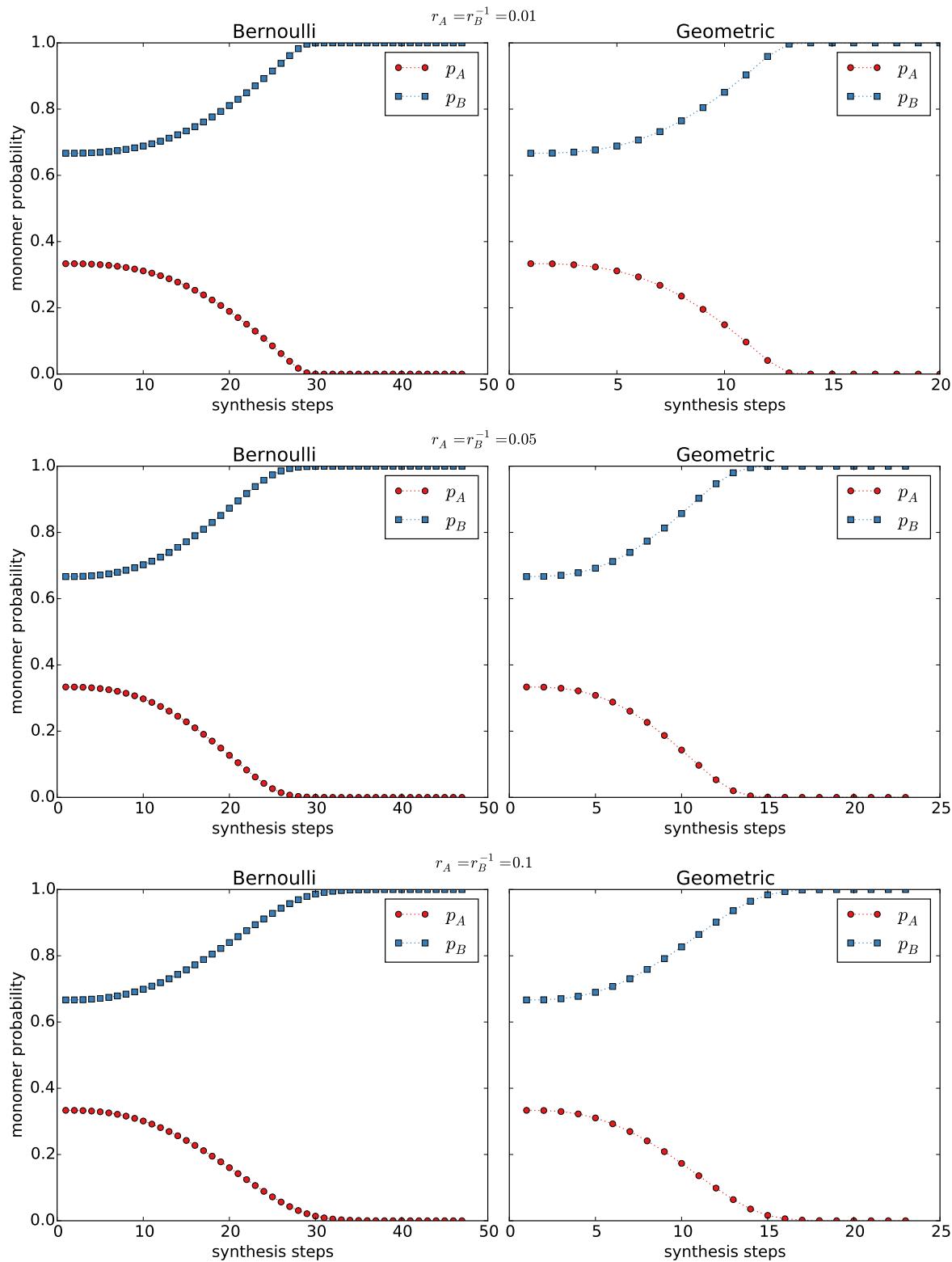


Figure S2. Distribution of chain lengths computed by the Monte-Carlo simulations and the Bernoulli (**left**) and Geometric models (**right**). Additionally, we plotted the binomial and negative binomial probability mass functions to show that the chain lengths computed by the models follow those distributions.

**Figure S3. Cont.**

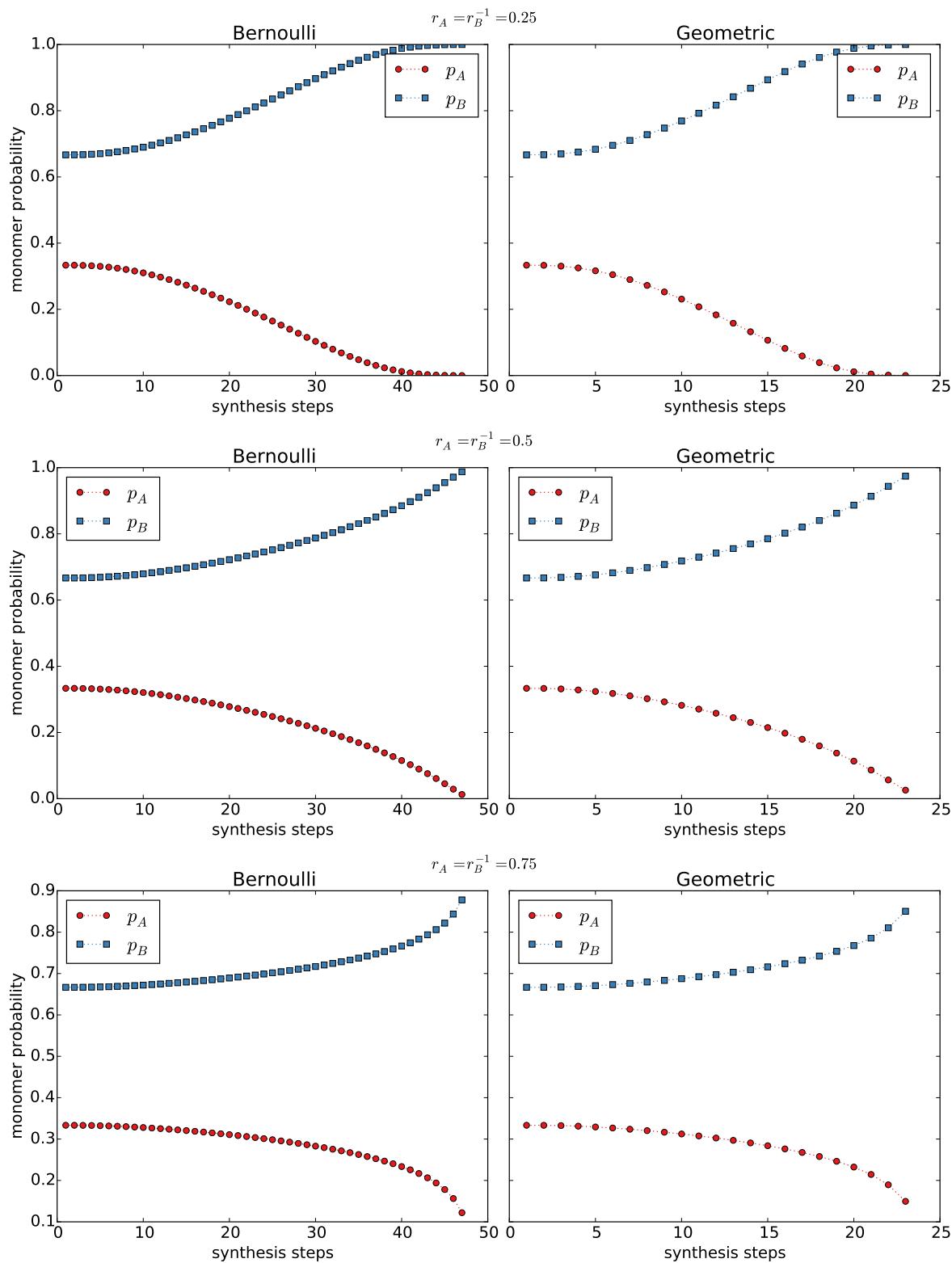
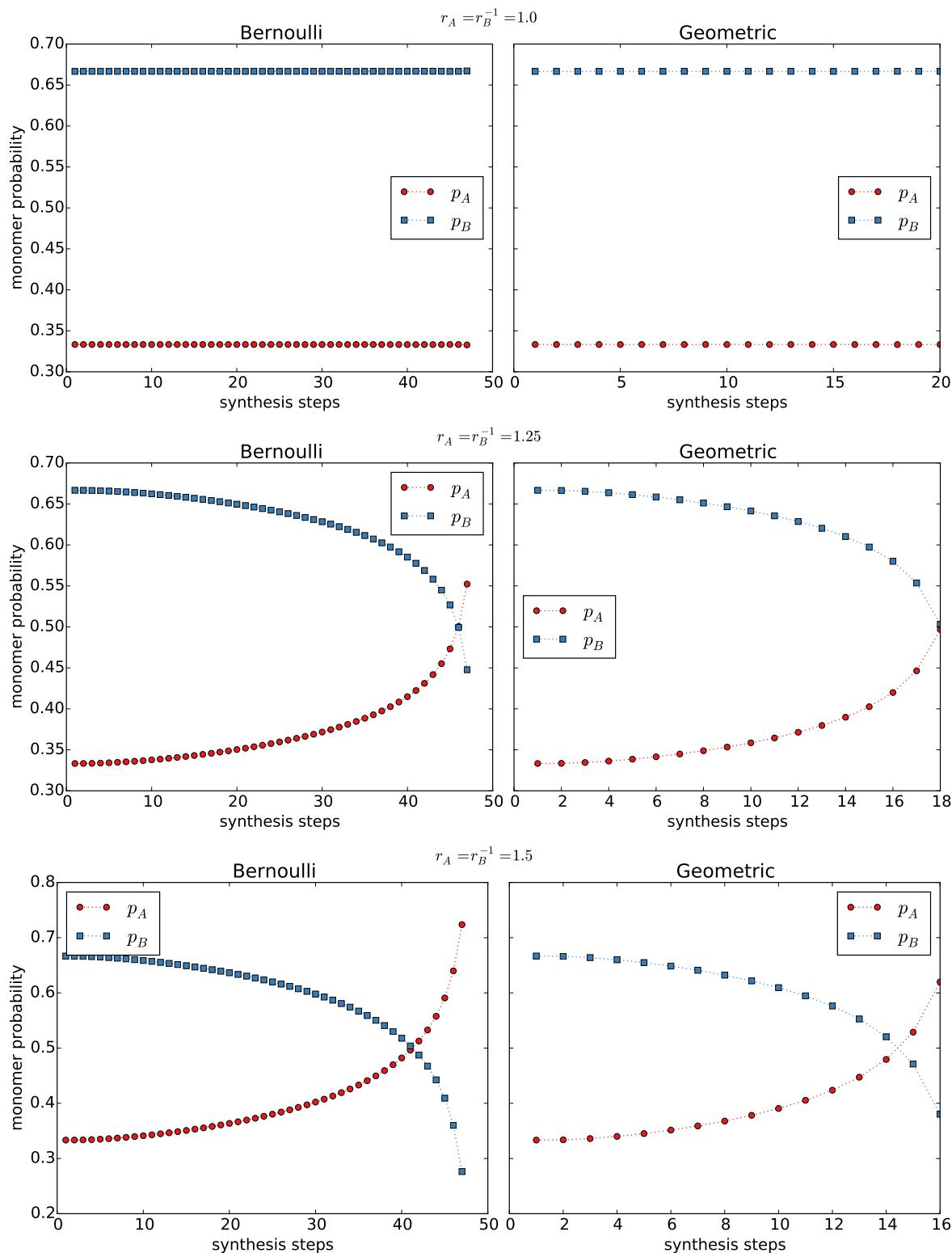


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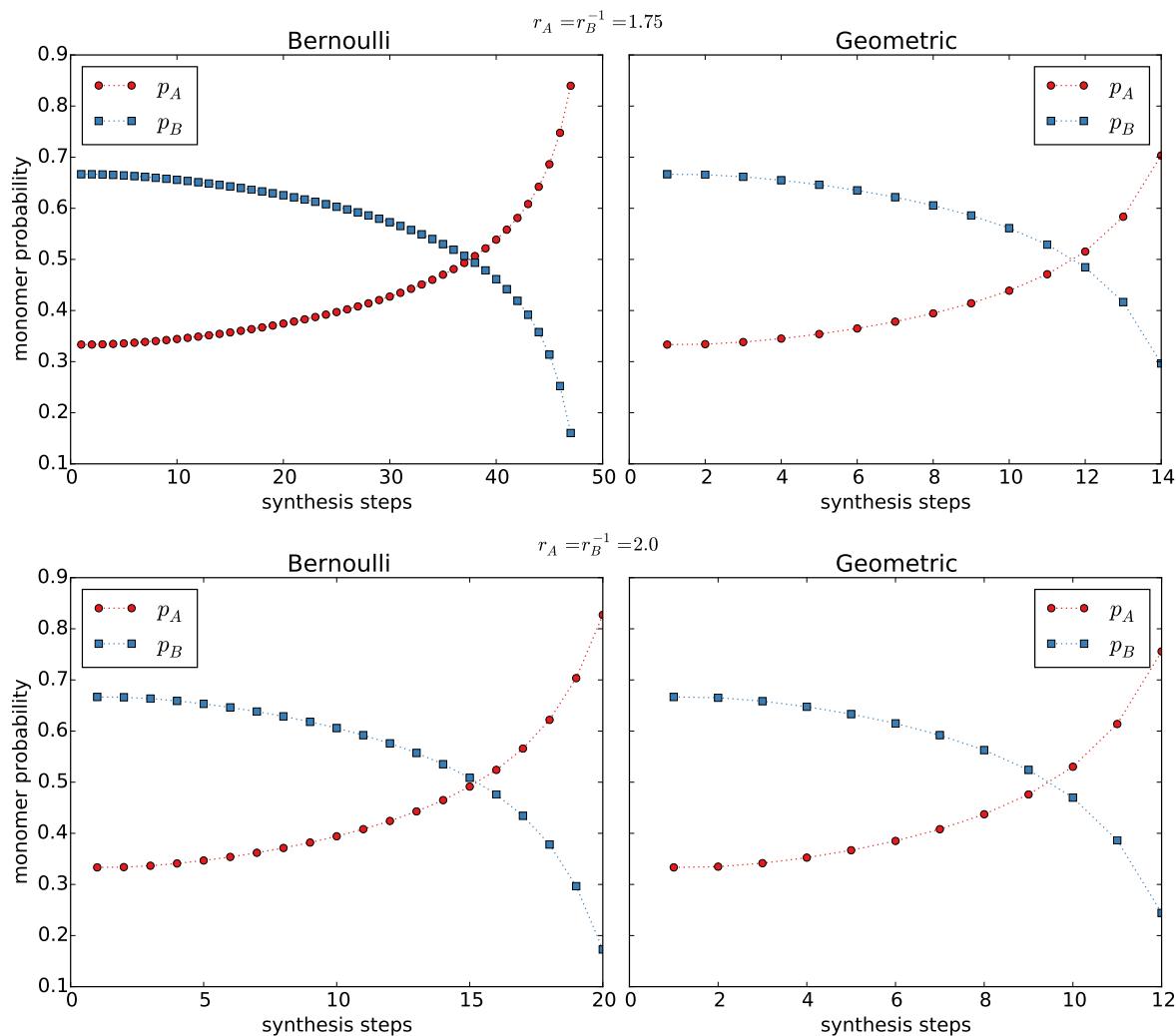
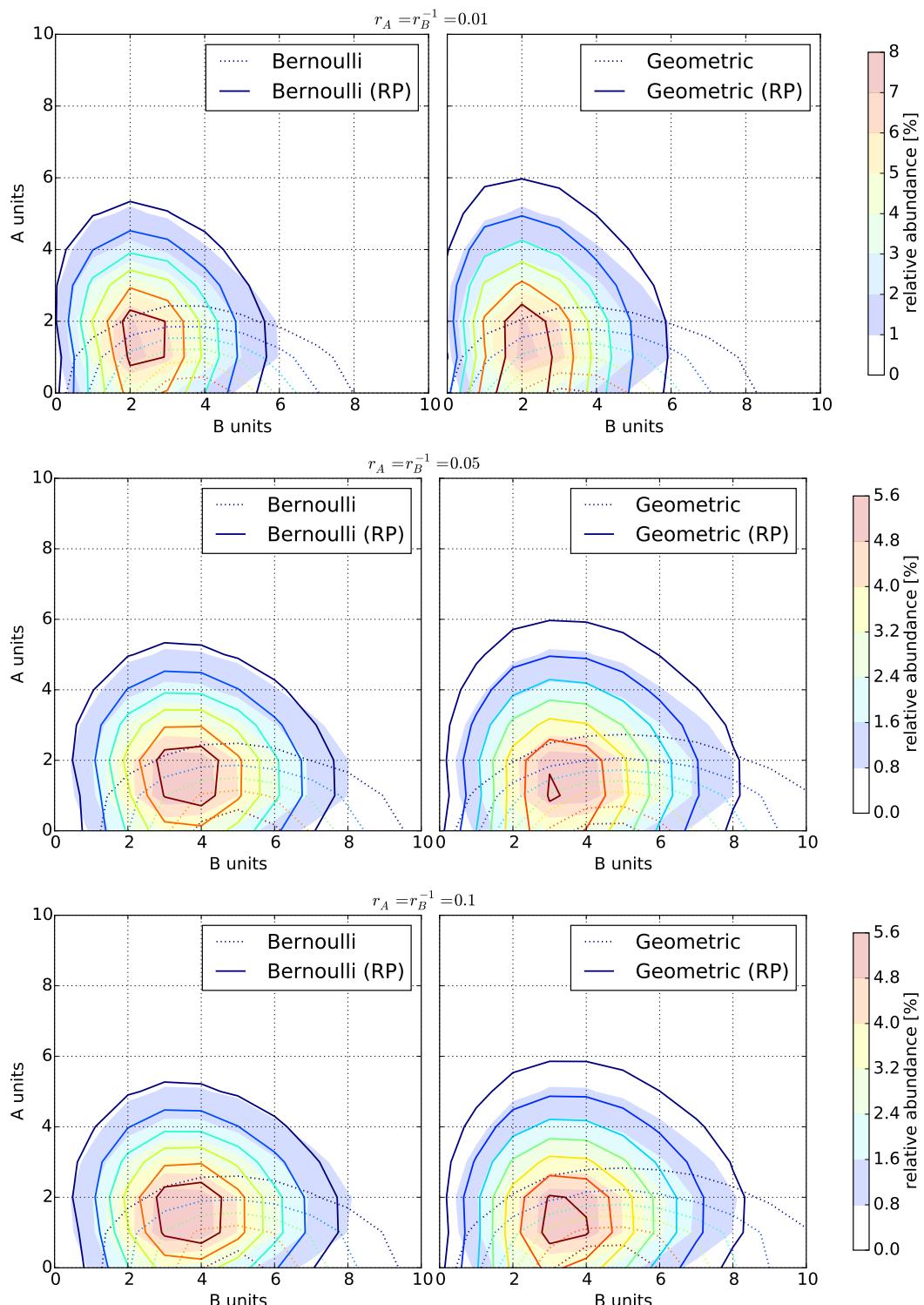
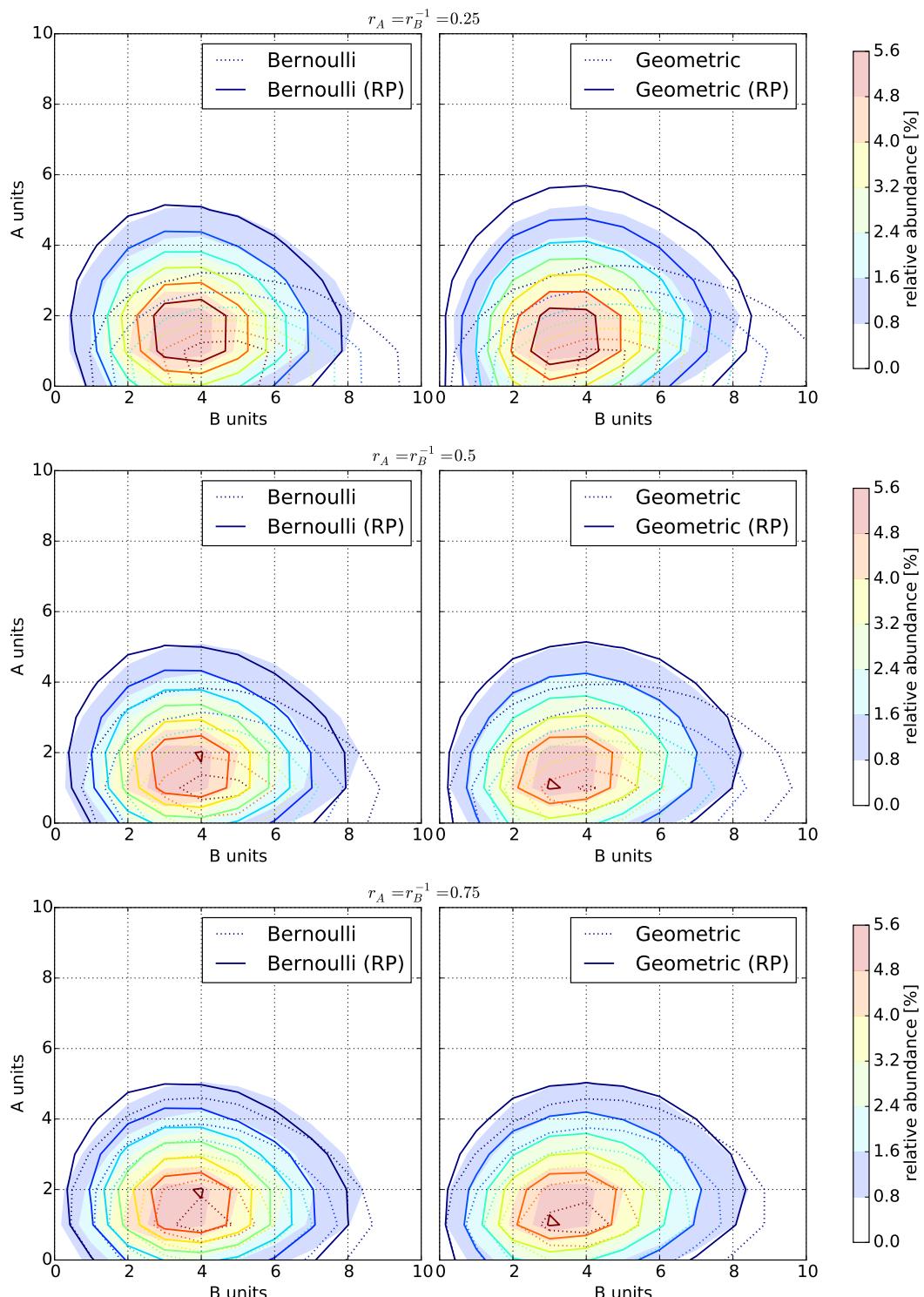
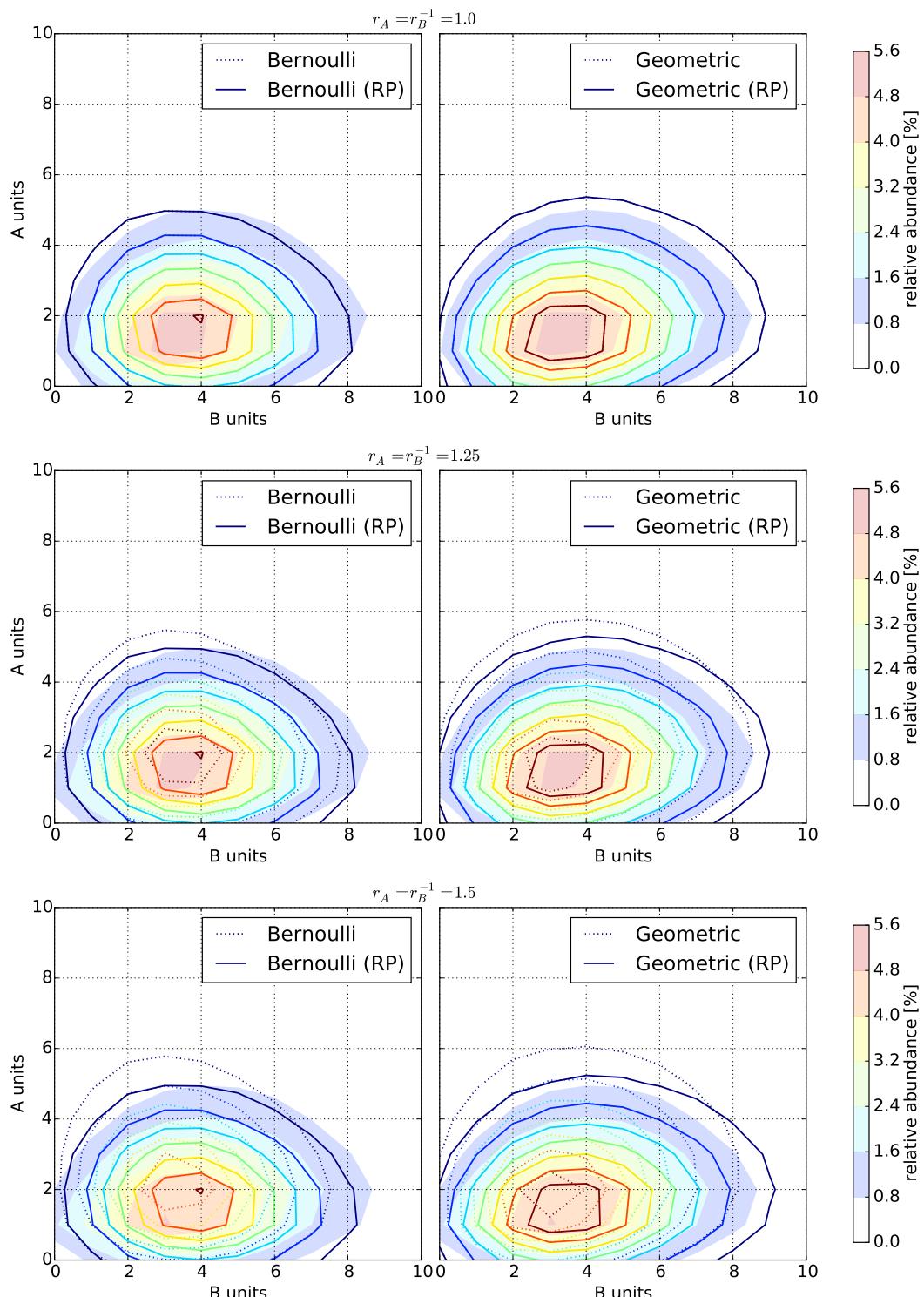


Figure S3. Monomer probabilities p_A and p_B for the Bernoulli (left) and Geometric (right) models calculated from the average concentrations.

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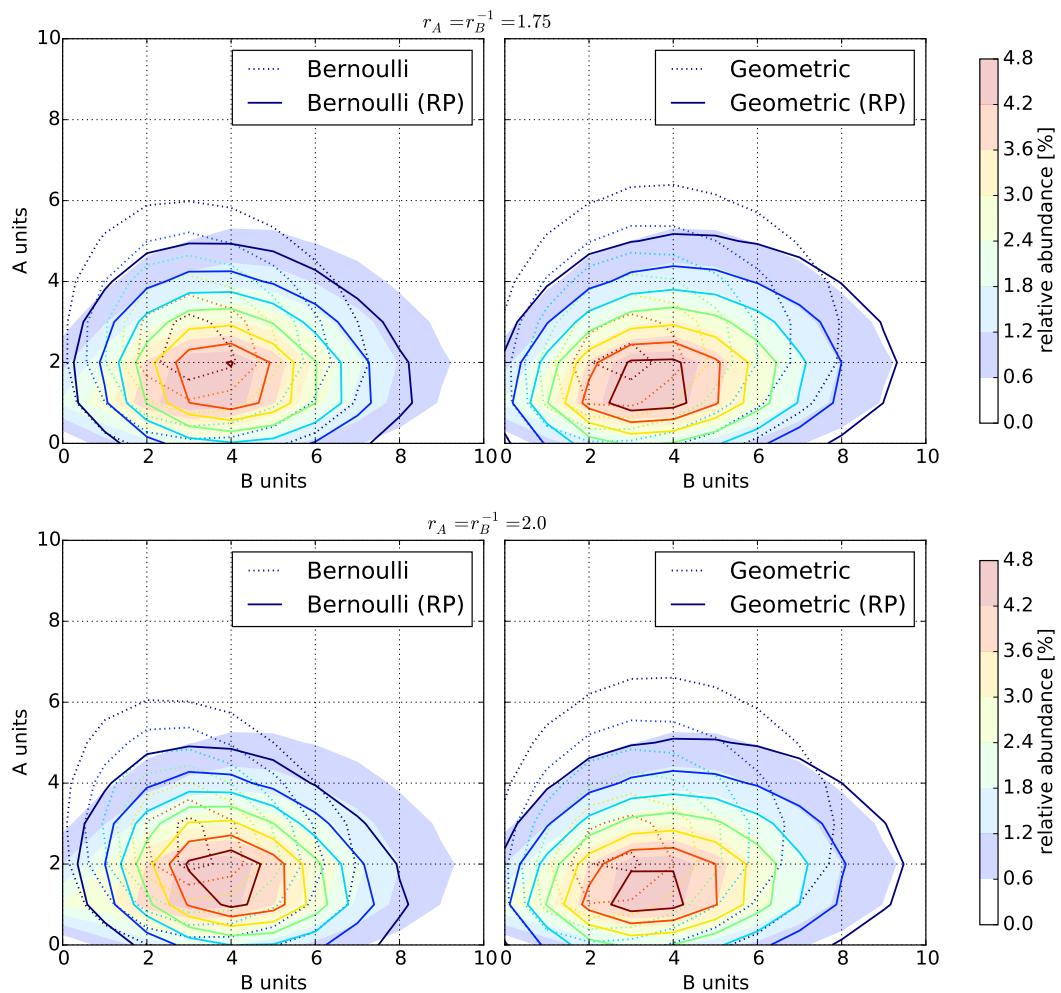


Figure S4. Copolymer fingerprints computed by the Monte-Carlo simulation (filled contours) compared to the fingerprints computed by the statistical models (solid and dashed contours). **Left:** Bernoulli model with and without reactivity parameters (RP); **Right:** Geometric model with and without reactivity parameters (RP).