



Supplement of

REHEATFUNQ (REgional HEAT-Flow Uncertainty and aNomaly Quantification) 2.0.1: a model for regional aggregate heat flow distributions and anomaly quantification

Malte Jörn Ziebarth and Sebastian von Specht

Correspondence to: Malte Jörn Ziebarth (ziebarth@gfz-potsdam.de)

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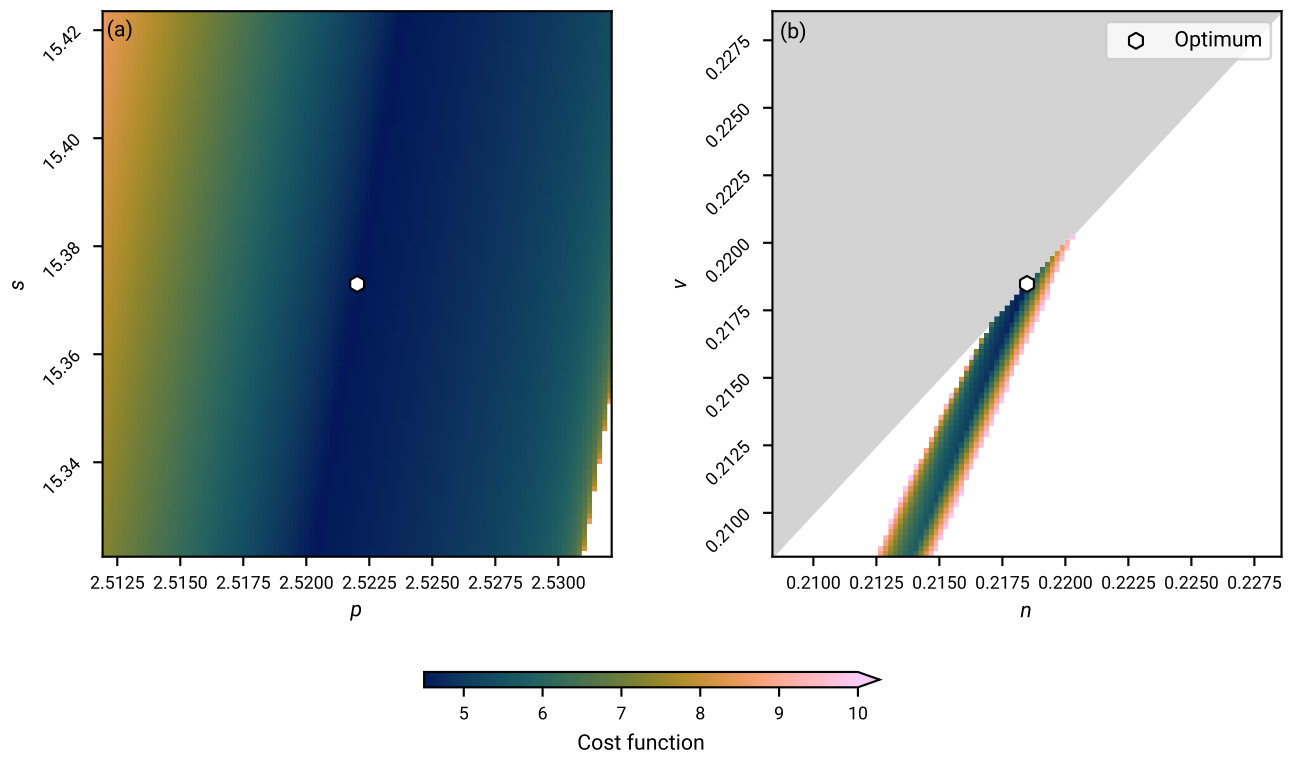


Figure S1. Cost landscape of the minimum surprise estimate. Panel (a): p - s -slice surrounding the final parameter estimate (FPE) $(\hat{p}, \hat{s}, \hat{n}, \hat{\nu})$. Panel (b) n - ν -slice surrounding the the FPE. The gray area is forbidden due to the condition $\nu \leq n$.

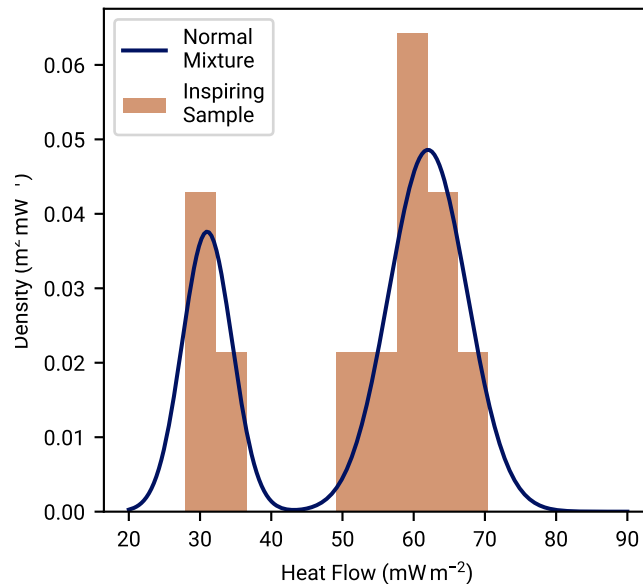


Figure S2. Histogram of the data that inspired the mixture model D1 of Fig. 15 of the main manuscript. The data is one regional aggregate heat flow distribution from an RGRDC. The data can be retrieved from the NGHF data base using the indices provided in the `A2-Distributions-for-Resilience.json` file.

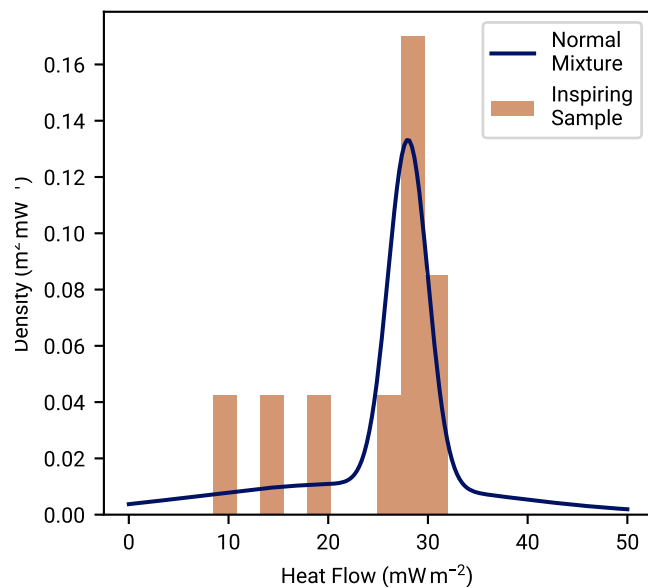


Figure S3. Histogram of the data that inspired the mixture model D2 of Fig. 15 of the main manuscript. The data is one regional aggregate heat flow distribution from an RGRDC. The data can be retrieved from the NGHF data base using the indices provided in the `A2-Distributions-for-Resilience.json` file.

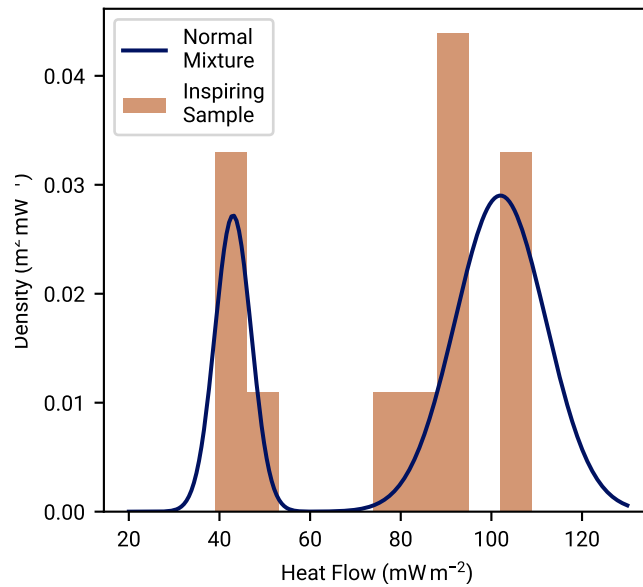
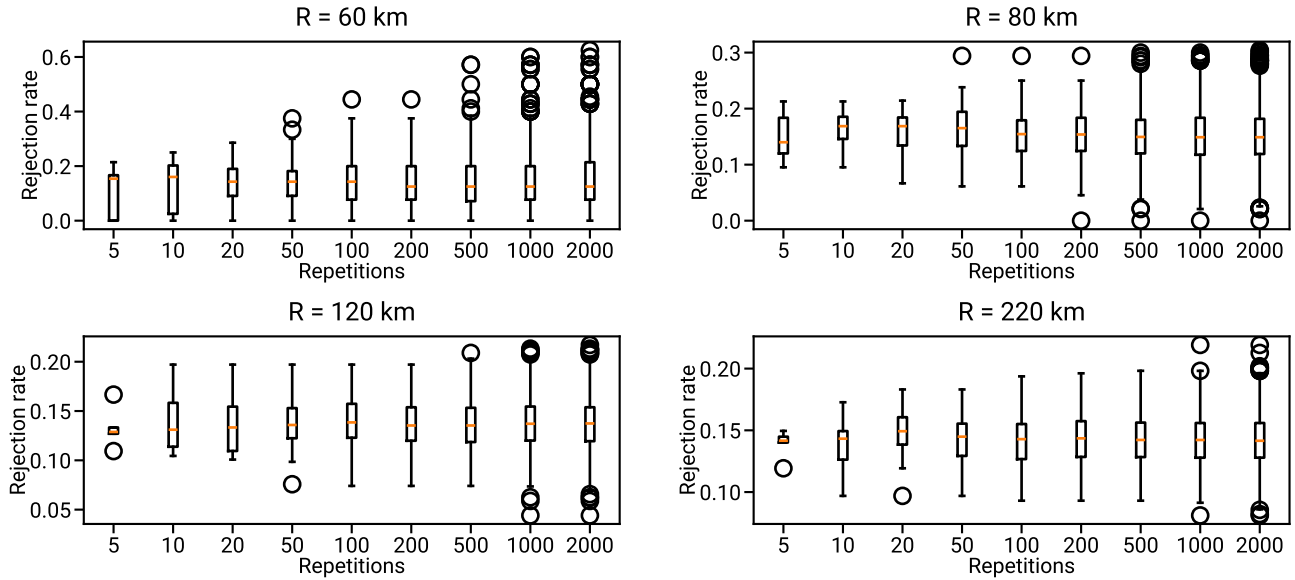


Figure S4. Histogram of the data that inspired the mixture model D3 of Fig. 15 of the main manuscript. The data is one regional aggregate heat flow distribution from an RGRDC. The data can be retrieved from the NGHF data base using the indices provided in the `A2-Distributions-for-Resilience.json` file.

Kolmogorov-Smirnov



Anderson-Darling

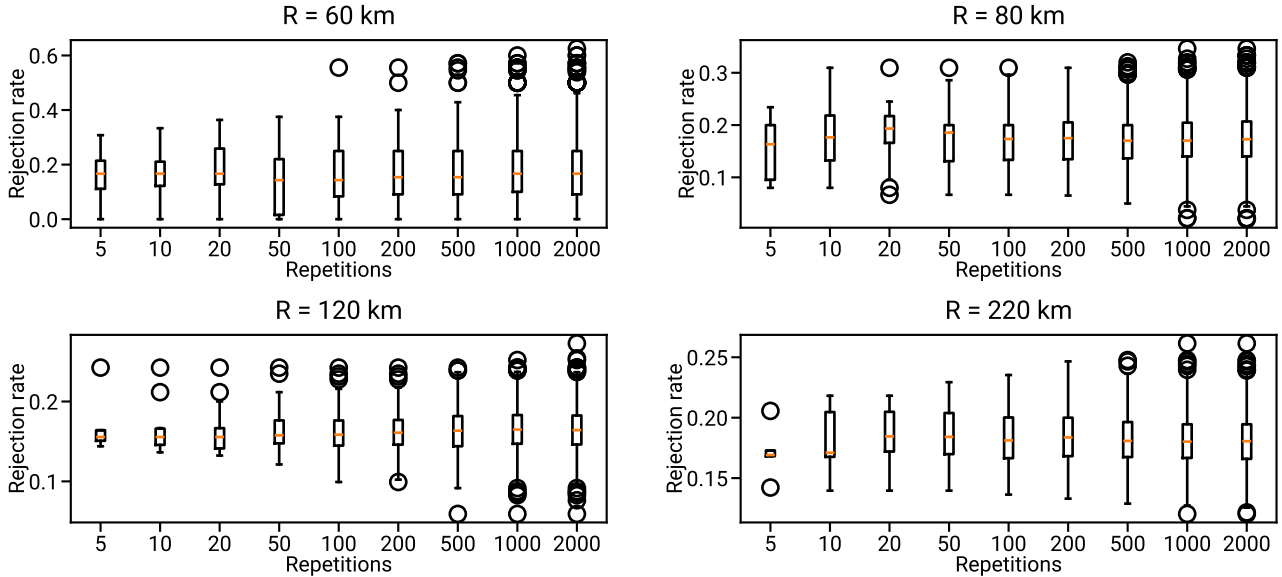
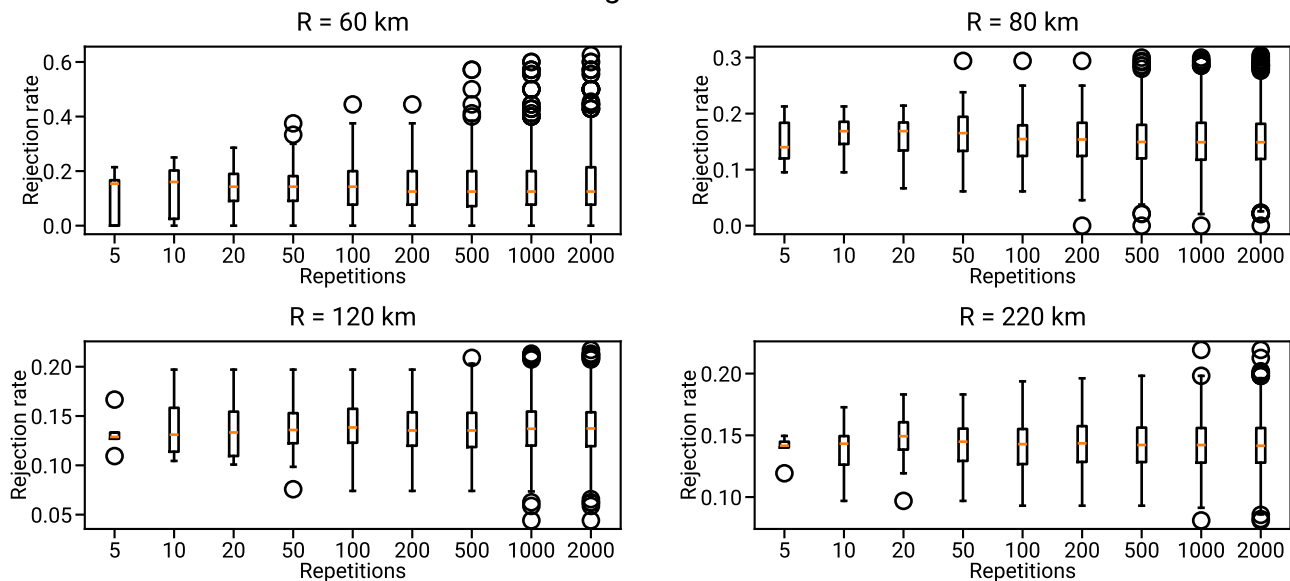


Figure S5. Convergence of the “NGHF RGRDCs” boxplots of Fig. 10 of the main manuscript as the number of iterations (repetitions) of the RGRDC is increased.

Kolmogorov-Smirnov



Anderson-Darling

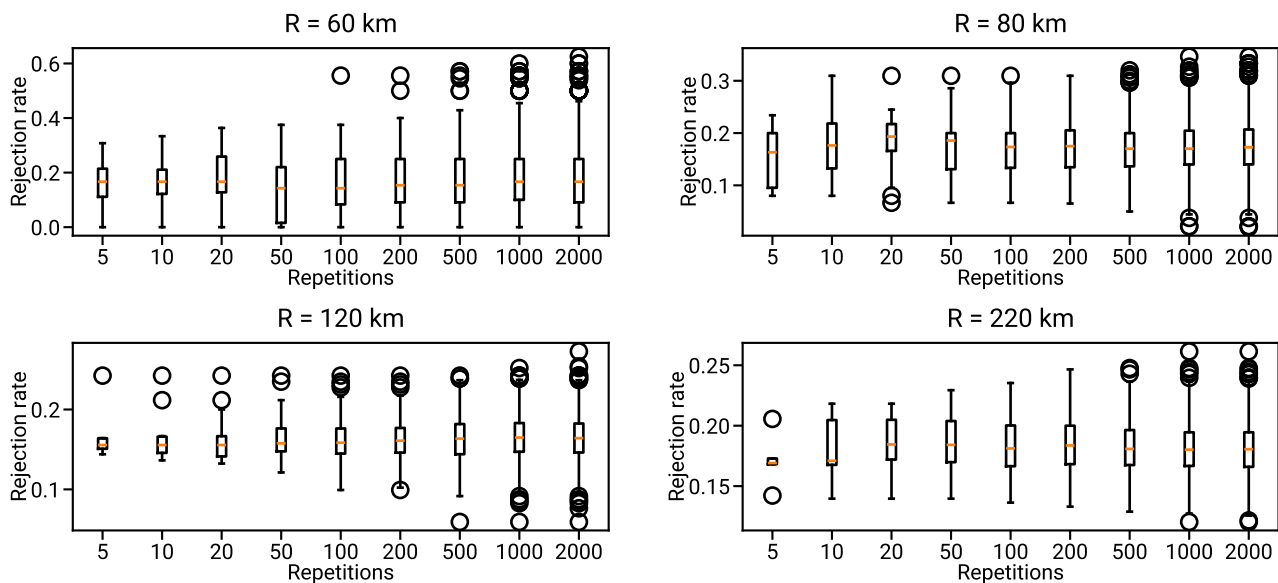


Figure S6. Convergence of the “Synthetic Gamma” boxplots of Fig. 10 of the main manuscript as the number of iterations (repetitions) of the RGRDC is increased.

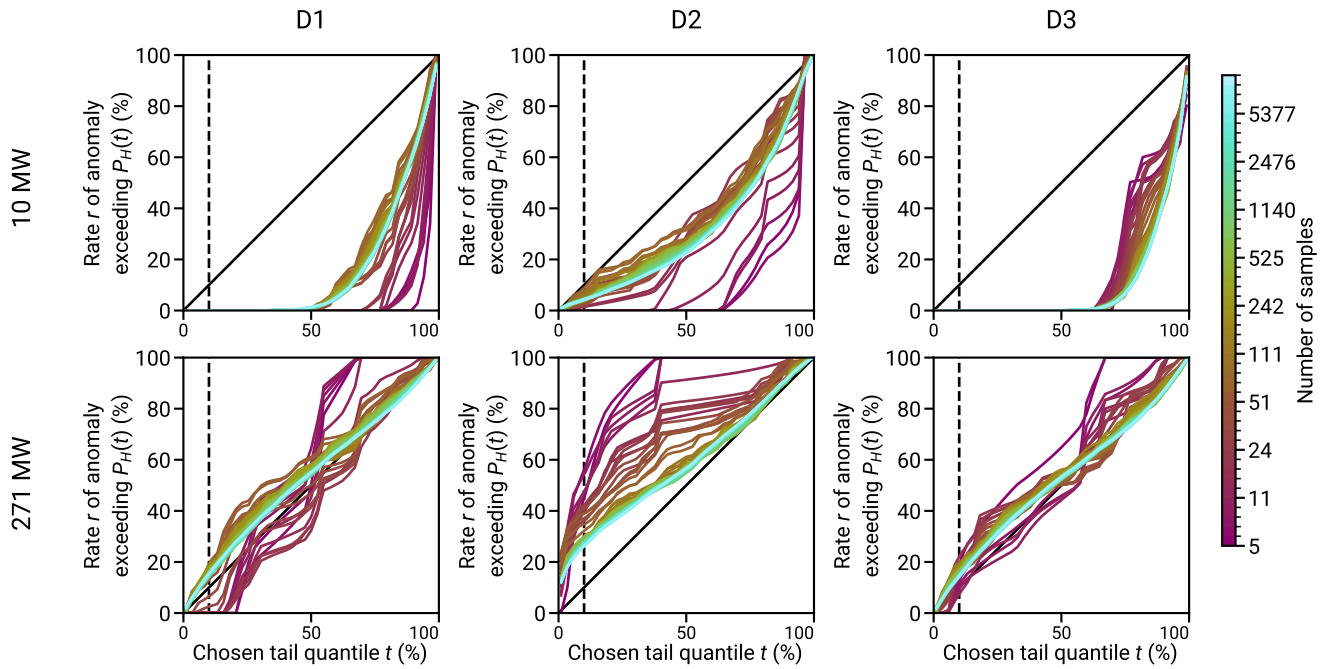


Figure S7. Convergence markers in panels (d), (h), and (l) of Fig. 15 of the main manuscript as the number of samples S is increased.

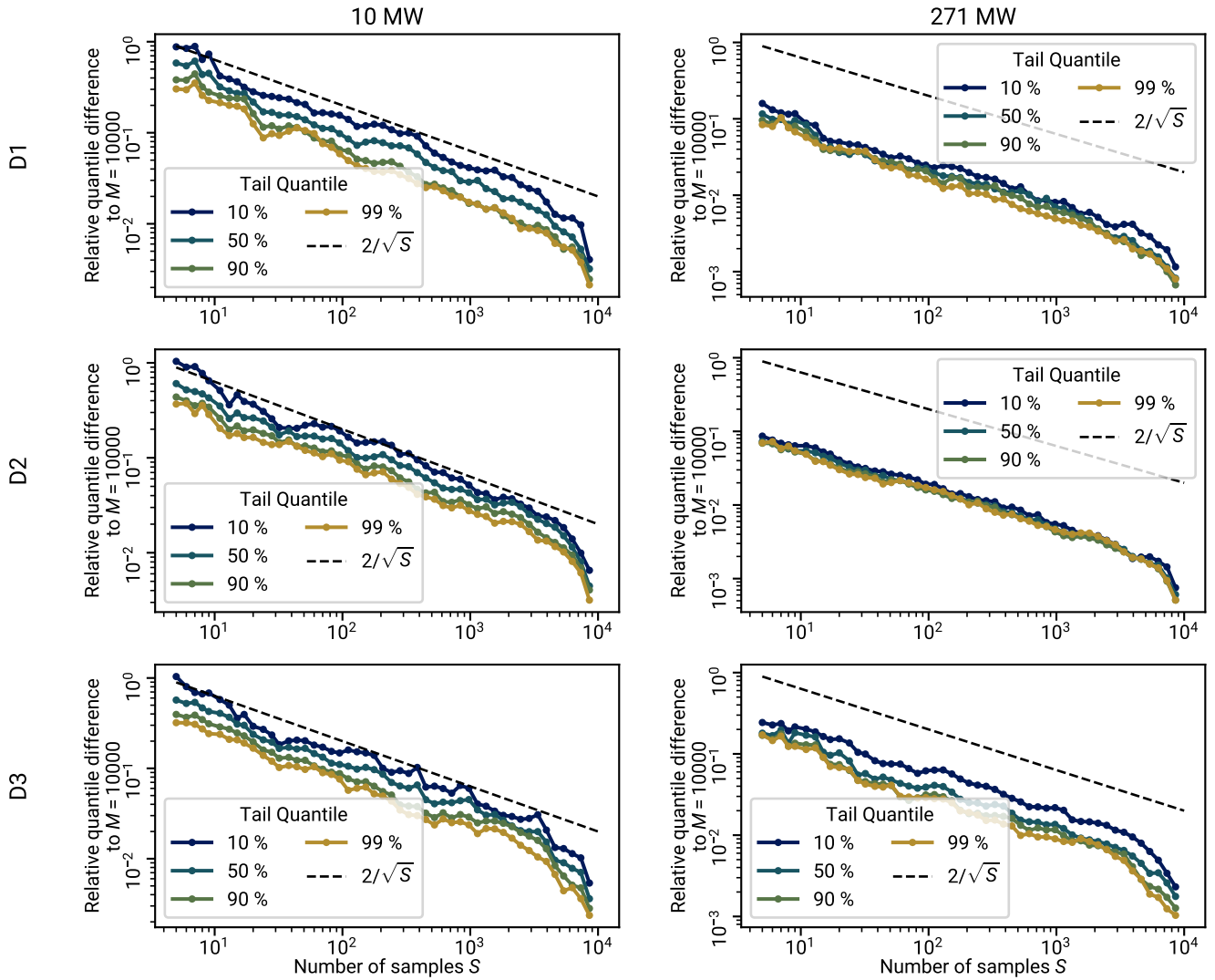


Figure S8. Convergence of the curves in panel (b), (c), (f), (g), (j), and (k) of Fig. 15 of the main manuscript as the number of samples S is increased.

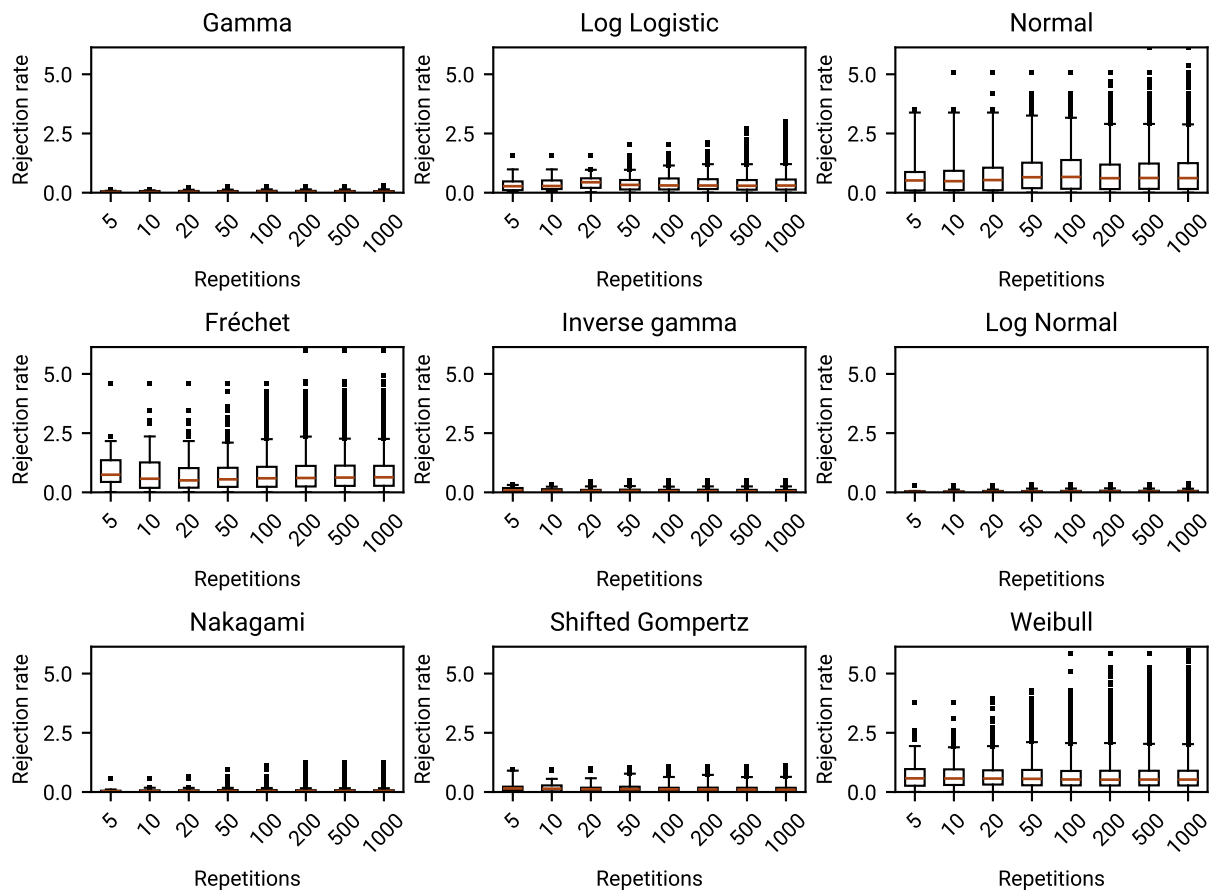


Figure S9. Convergence of the boxplots in Fig. 12 (a) of the main manuscript as the number of iterations (repetitions) of the RGRDC is increased.

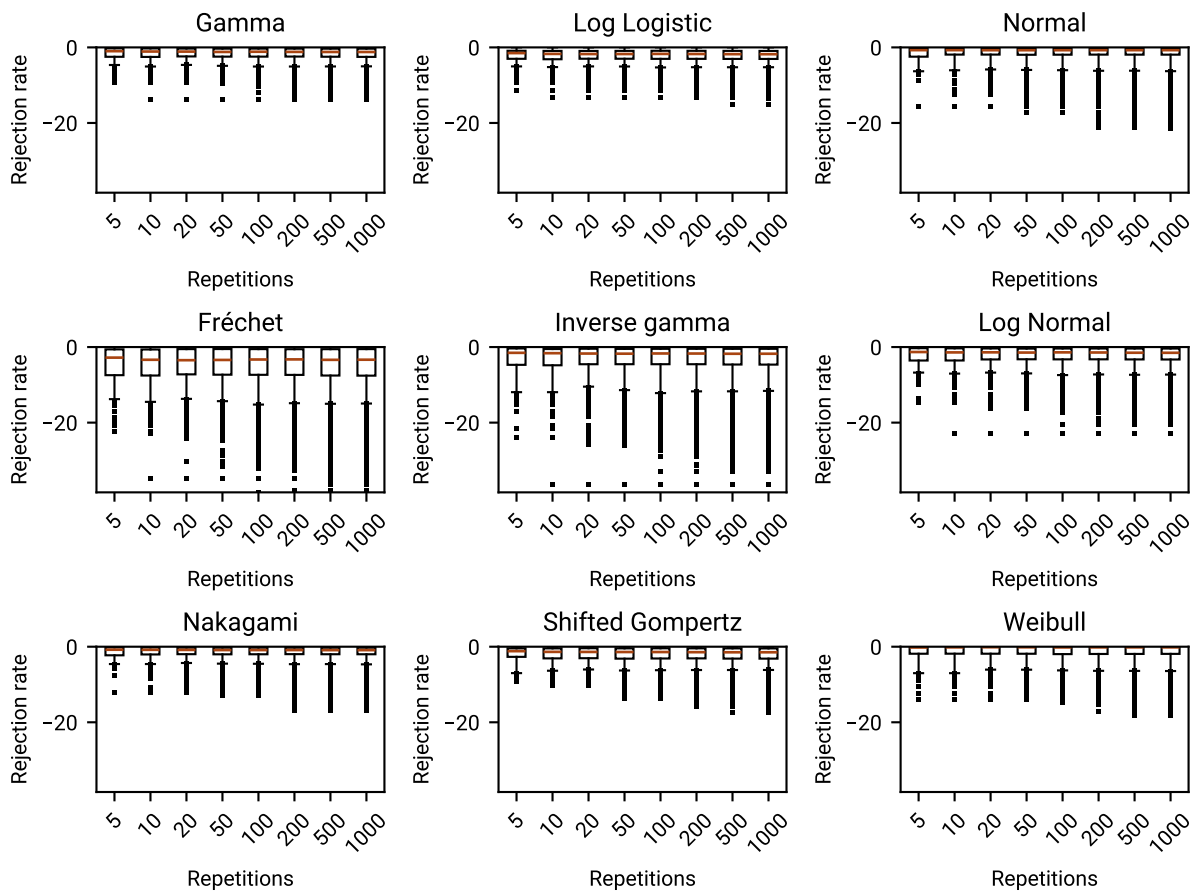


Figure S10. Convergence of the boxplots in Fig. 12 (b) of the main manuscript as the number of iterations (repetitions) of the RGRDC is increased.

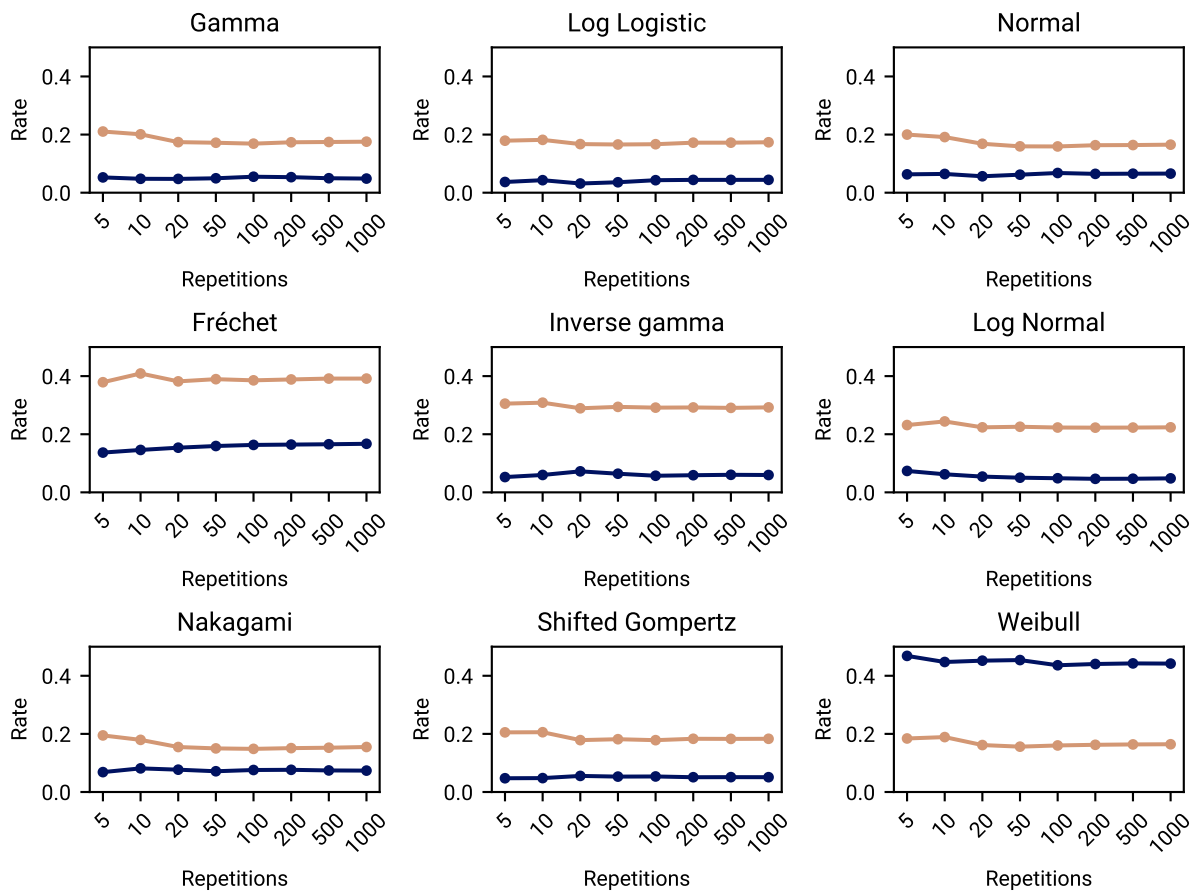


Figure S11. Convergence of the bars in Fig. 12 (c) of the main manuscript as the number of iterations (repetitions) of the RGRDC is increased.