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Evenly spaced Detrended Fluctuation Analysis: Selecting the number of points for the diffusion plot

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1. We examined the performance of the evenly spaced Detrended Fluctuation Analysis algorithms while manipulating the number of points in the diffusion plot, k .
2. Simulated and experimental series of various lengths were analyzed.
3. Larger values of k substantially reduce measurement uncertainty for single trials.
4. Between-trial means and standard deviations of α were less sensitive to k .
5. We recommend maximizing k based on series length to reduce measurement uncertainty.

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