Bias correction for estimators of the extremal index

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We investigate the joint asymptotic behavior of so-called blocks estimator of the extremal index, that determines the mean length of clusters of extremes, based on the exceedances over different thresholds. Due to the large bias of these estimators, the resulting estimates are usually very sensitive to the choice of the threshold and thus difficult to interpret. We propose and examine a bias correction that asymptotically removes the leading bias term while the rate of convergence of the random error is preserved.

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