SCED Special Issue - Analysis with $rho_M = 0.7$, $rho_Y = 0.7$, prop_indir_dir = 0.5

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05/01/2021

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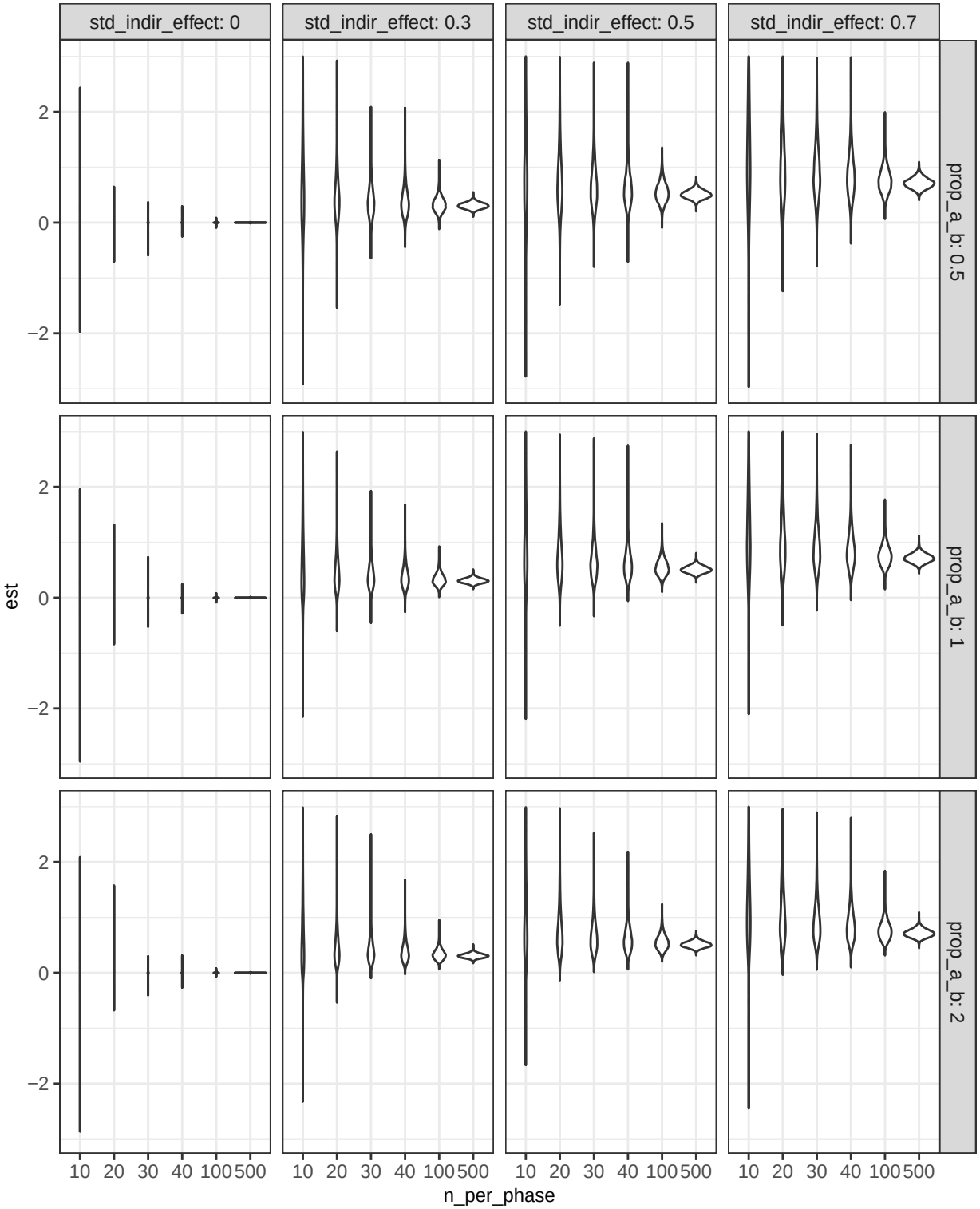
1 Conditions

- measurements per phase: `10, 20, 30, 40, 100, 500`
- standardized indirect effect (ab/σ_Y): `0, 0.3, 0.5, 0.7`
- proportion of indirect and direct effect: (ab/c'): `0.2, 0.5, 0.8`
- proportian of a and b (a/b): 0.5
- autocorrelation of Y (ρ_Y): 0.7
- autocorrelation of M (ρ_M): 0.7

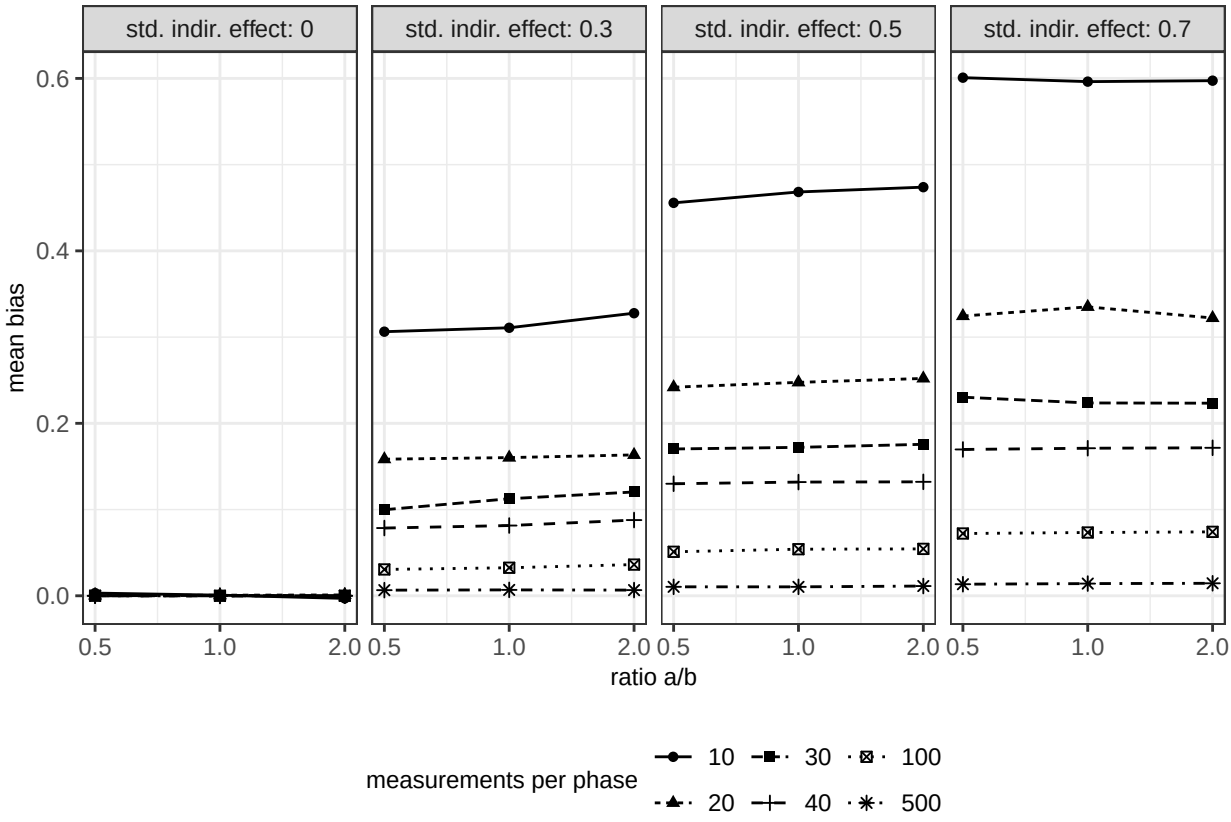
2 Dependent variable

- Standardized Indirect Effect: ab/σ_Y

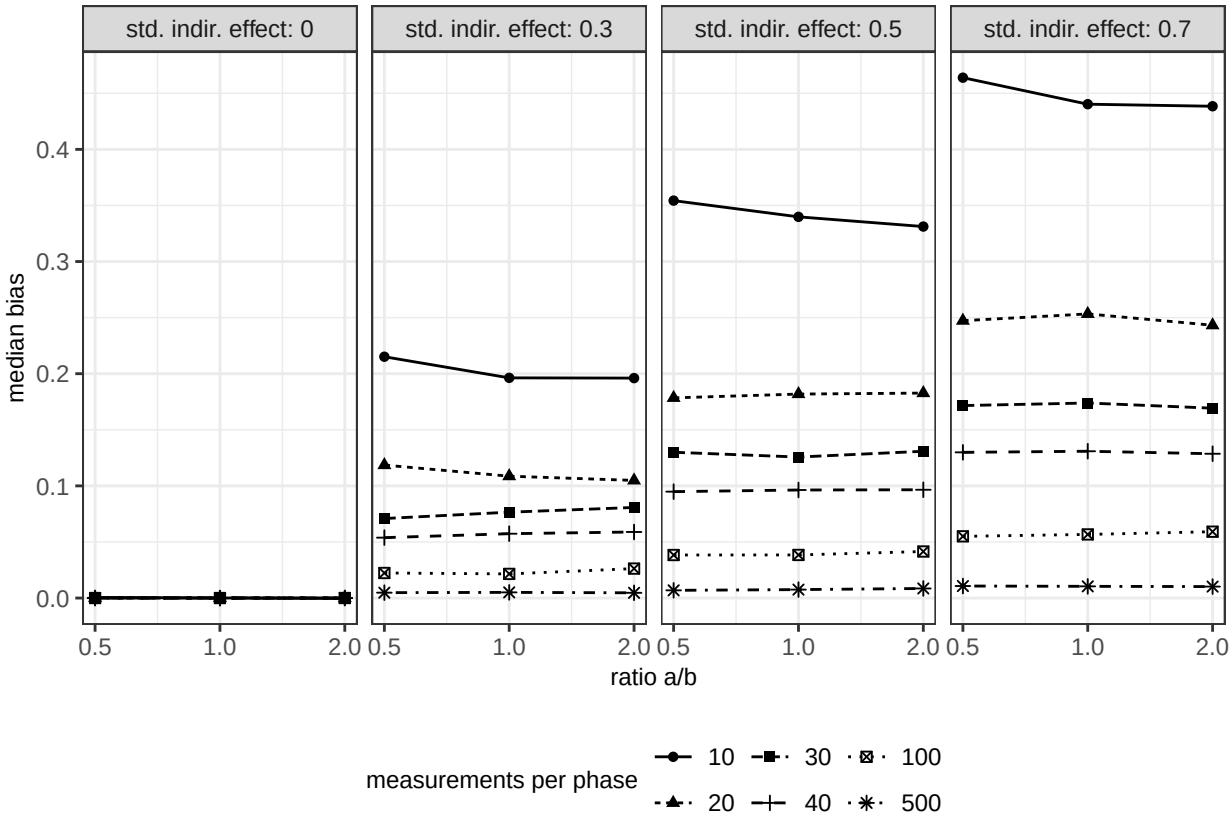
3 Violin plot



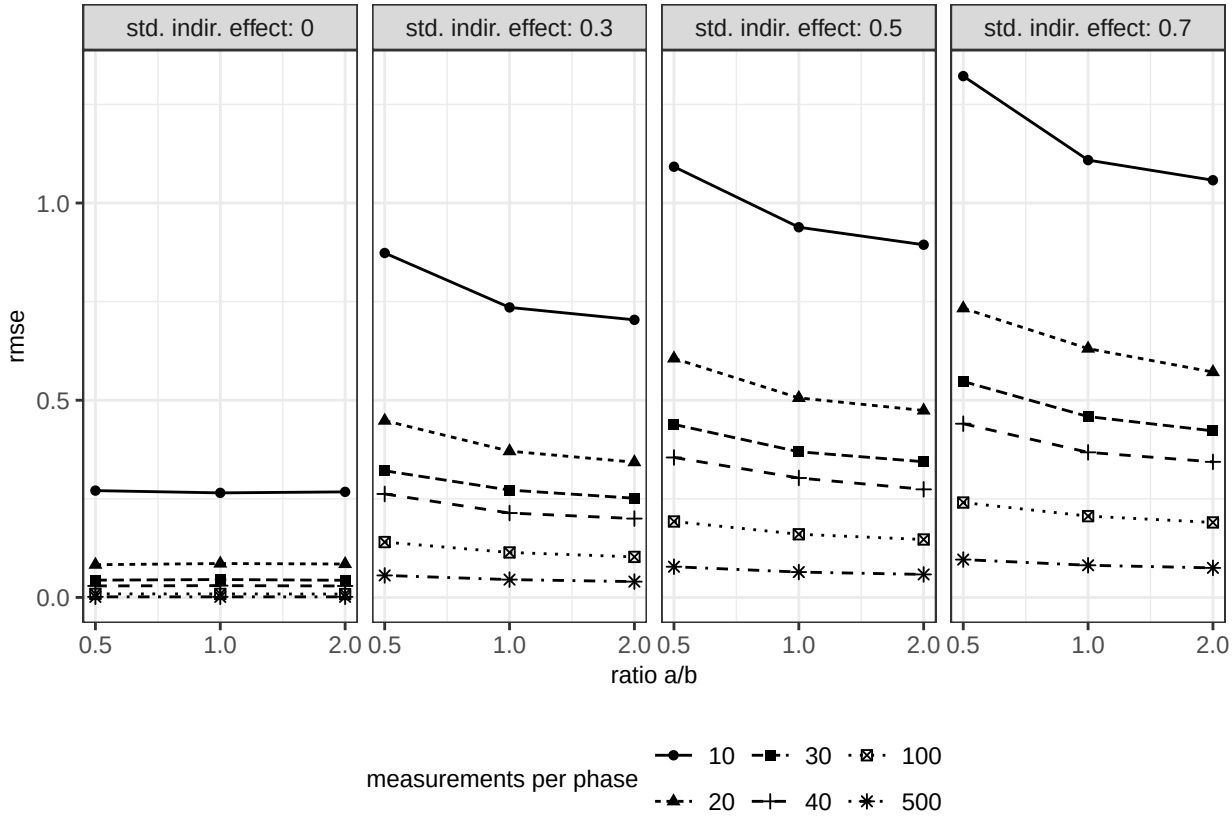
4 Bias: Mean deviation from true value



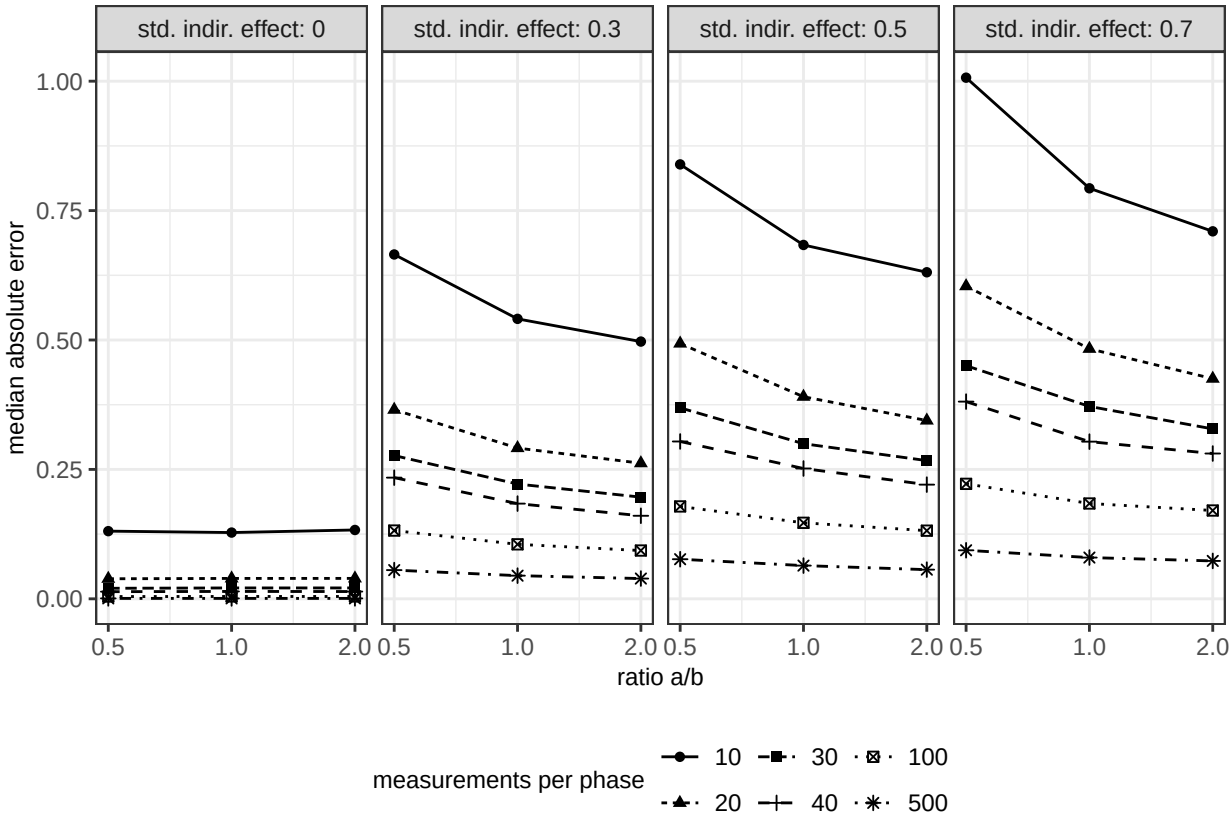
5 Bias: Median deviation from true value



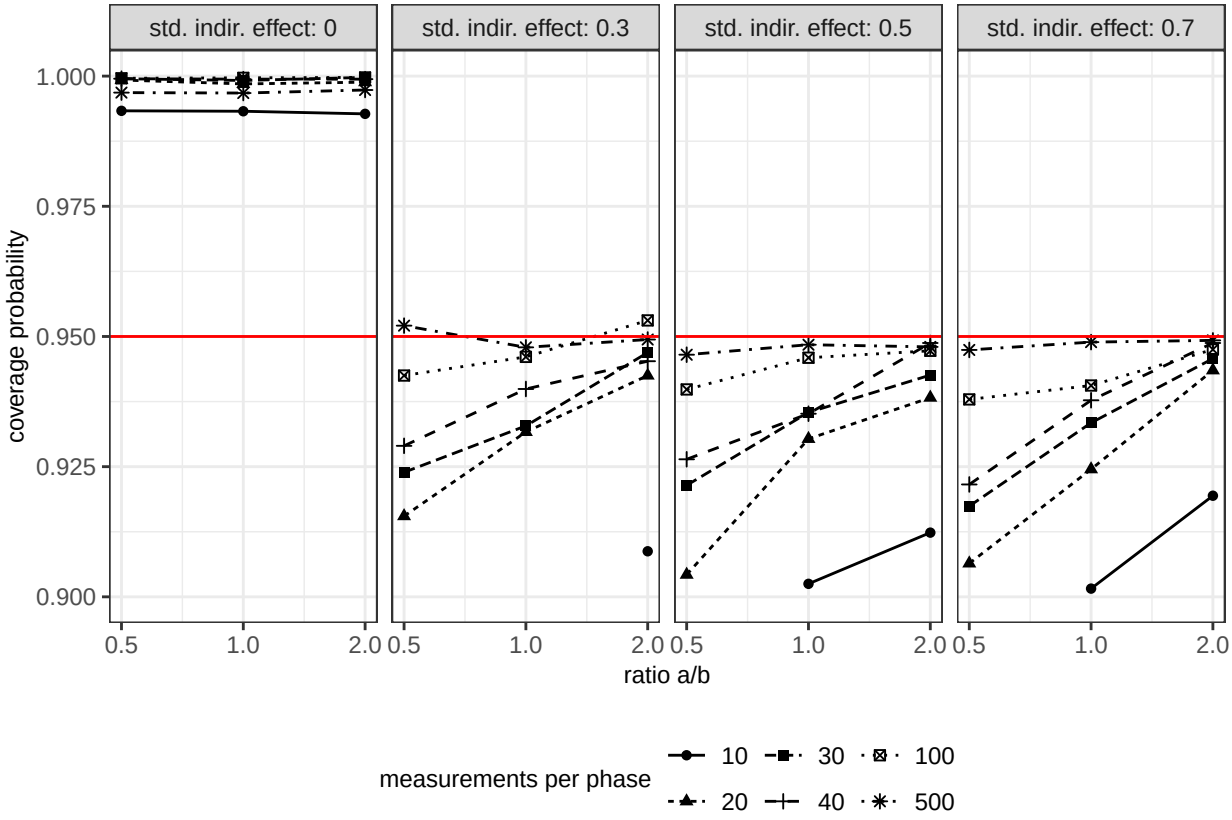
6 Root mean squared error



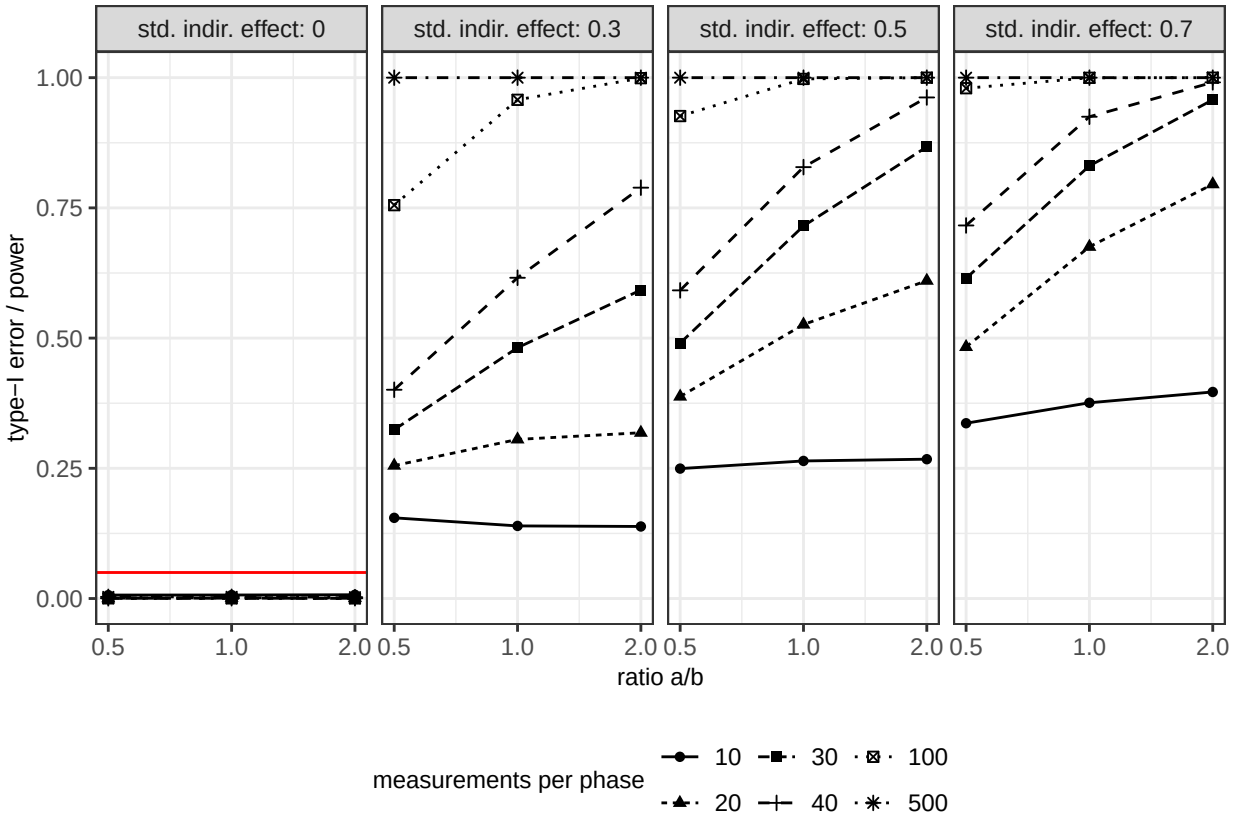
7 Median absolute error



8 Coverage probability

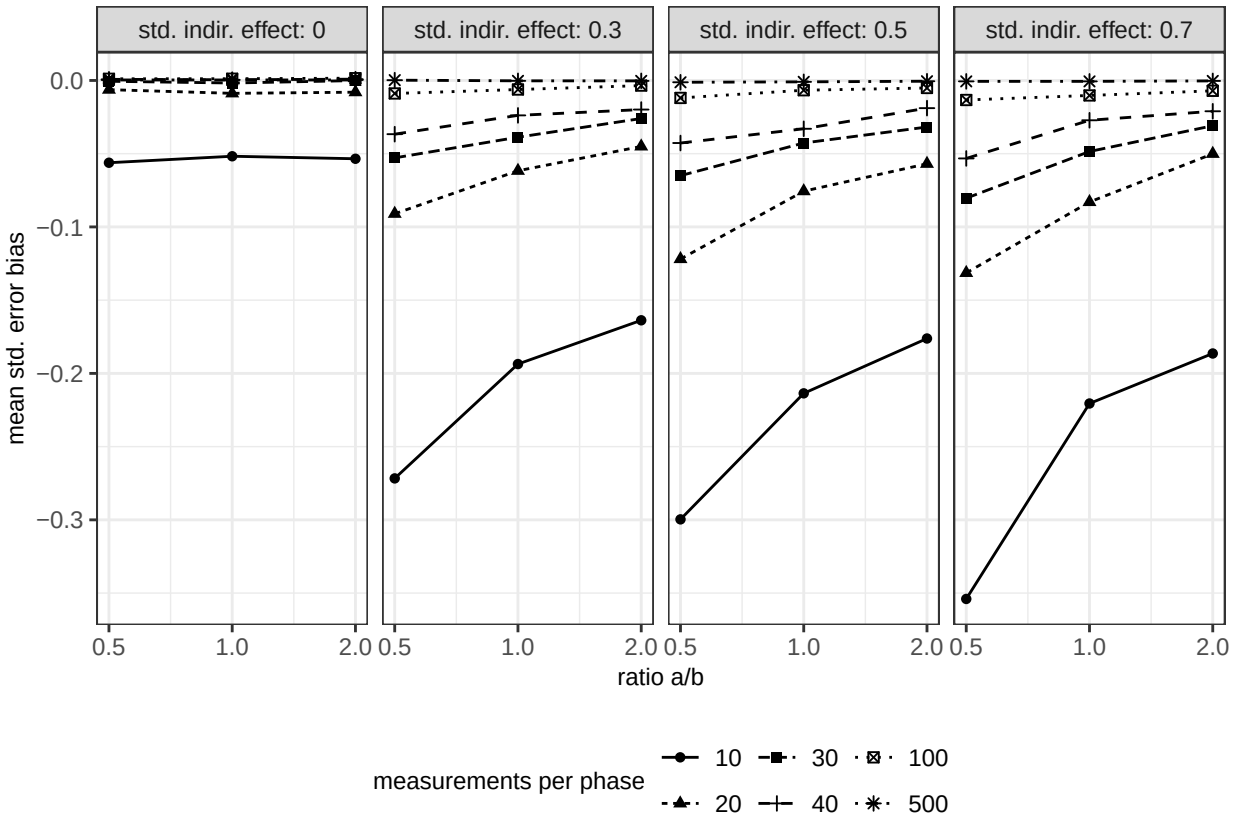


9 Power



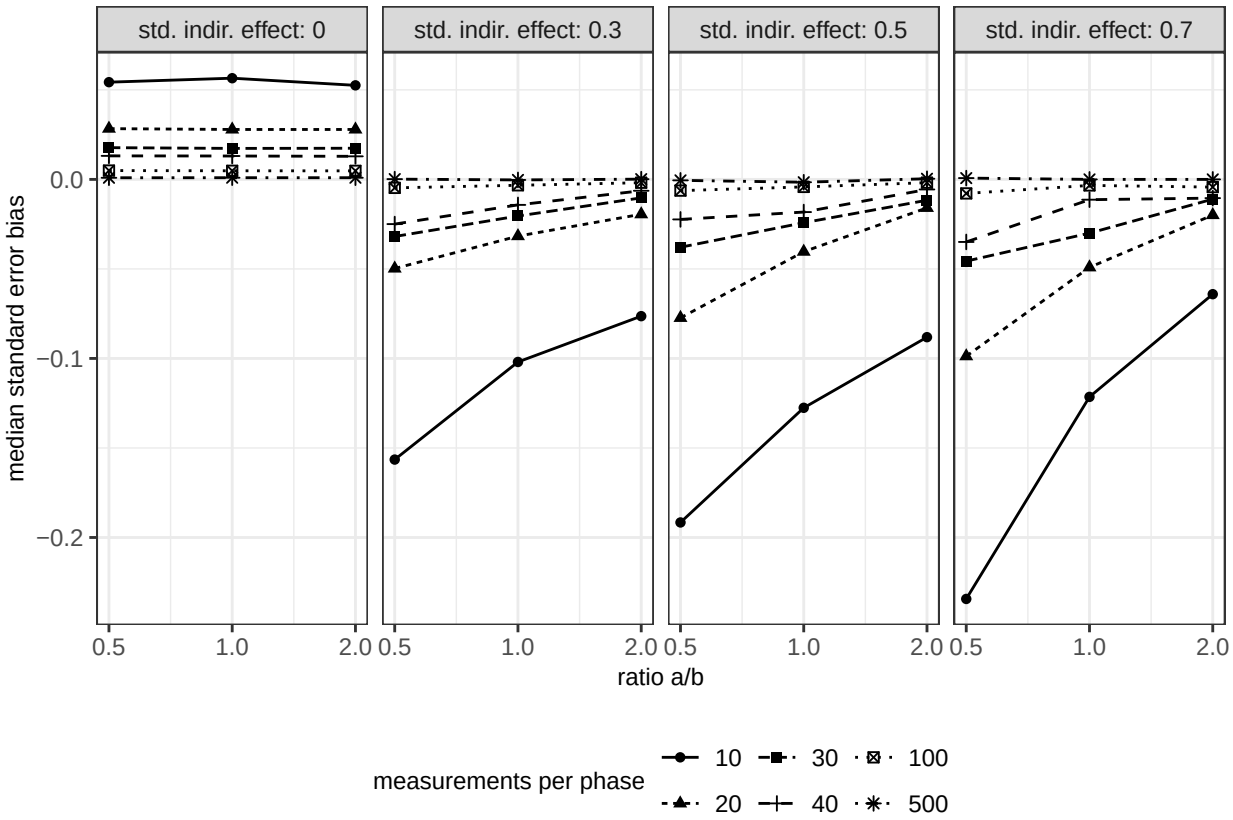
10 Standard error bias: Deviation of mean estimated standard error from empirical standard error (standard deviation of point estimates)

Note: Positive value indicates that the estimated standard error is graeter than the true standard error (which is estimated through the standard deviation of the point estimates).

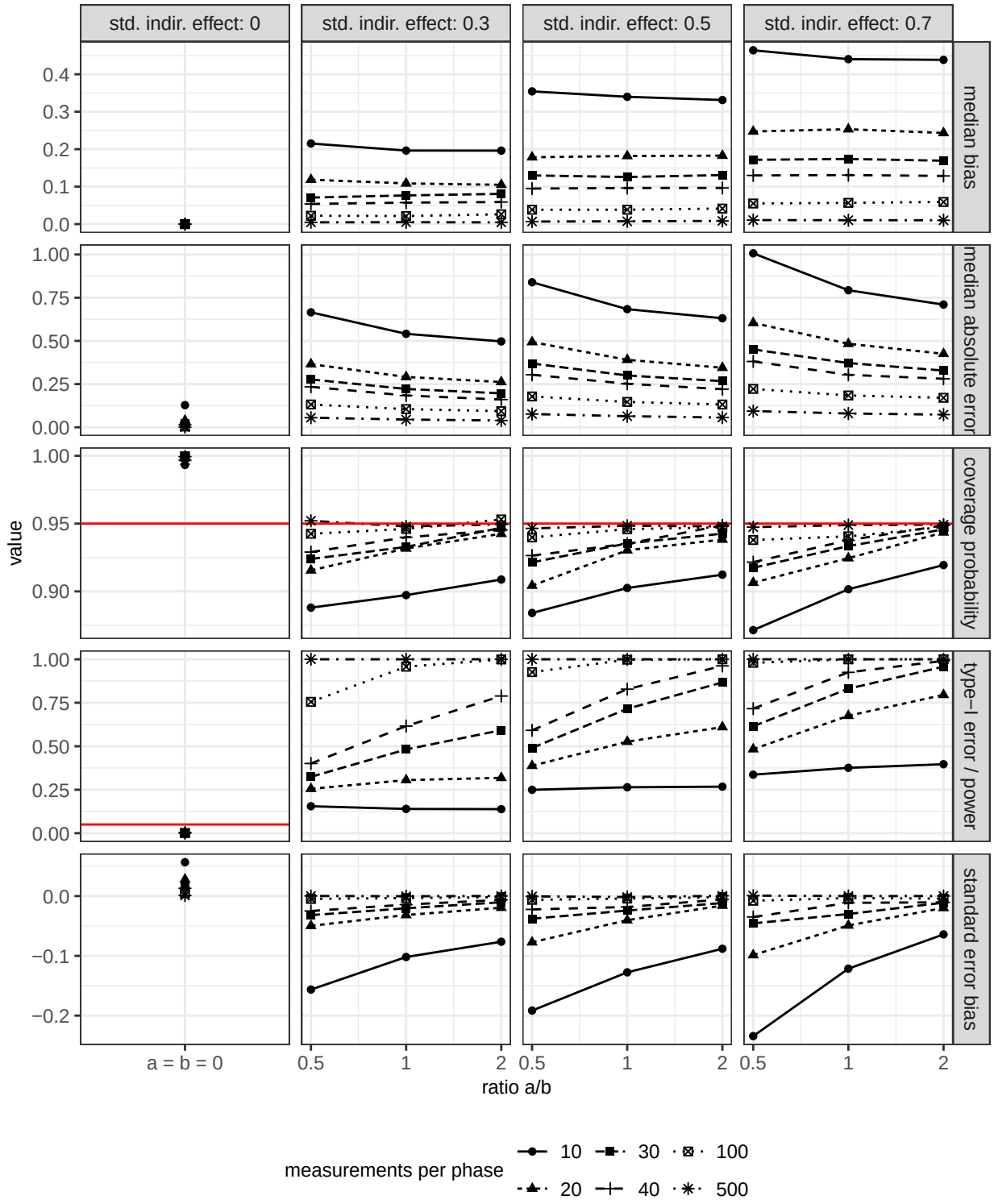
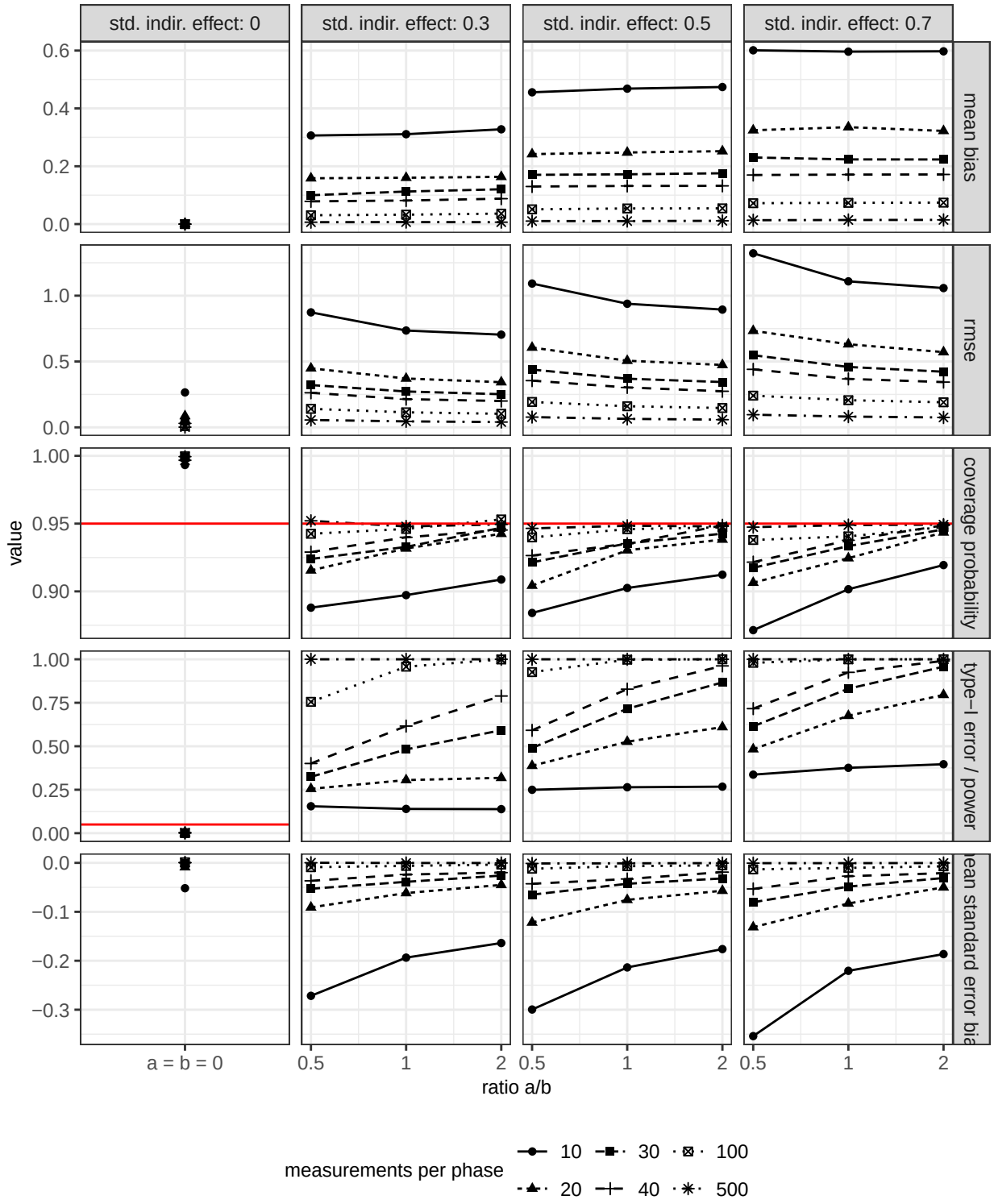


11 Standard error bias: Deviation of median estimated standard error from empirical standard error (MAD of point estimates)

Note: Positive value indicates that the estimated standard error is graeter than the true standard error (which is estimated through the MAD of the point estimates).


std. indir. effect: 0
std. indir. effect: 0.3
std. indir. effect: 0.5
std. indir. effect: 0.7
median standard error bias
0.0
−0.1
−0.2
0.5
1.0
2.0
ratio a/b
measurements per phase
10
20
30
40
100
500

12 Median based results



13 Mean based results