

Table 1: Empirical bias and mean-squared error of maximum likelihood (ML) and restricted maximum likelihood (REML) estimators of the variance  $\hat{\sigma}^2$  and correlation parameter  $\hat{\rho}$  of an exponential covariance function (parameterized in power-correlation form) for three mean structures, an intercept-only model, row effects, and both row and column effects.

Mean Effects	bias( $\hat{\sigma}^2$ )		bias( $\hat{\rho}$ )		MSE( $\hat{\sigma}^2$ )		MSE( $\hat{\rho}$ )	
	ML	REML	ML	REML	ML	REML	ML	REML
Constant	-0.049	0.007	-0.038	-0.014	0.041	0.054	0.009	0.009
Row	-0.204	0.030	-0.096	-0.014	0.068	0.164	0.019	0.012
Row-Column	-0.360	0.618	-0.183	-0.012	0.146	295.725	0.045	0.018

Table 2: The average length,  $\text{length}[\text{CI}(\hat{\beta})]$ , and coverage,  $\text{cover}[\text{CI}(\hat{\beta})]$ , of the 90% confidence interval of  $\hat{\beta}$  when using maximum likelihood (ML) and restricted maximum likelihood (REML) estimators for an exponential covariance function (parameterized in power-correlation form) for three mean structures.

Mean Effects	length[CI( $\hat{\beta}$ )]		cover[CI( $\hat{\beta}$ )]	
	ML	REML	ML	REML
Constant	0.741	0.805	0.823	0.85
Row	1.609	1.928	0.822	0.887
Row-Column	1.384	2.011	0.750	0.884