Tables of simulation results

Contents

Simple random sampling . . . 3
Type I errors ($n = 500$) . . . 3
Type I errors ($n = 1000$) . . . 4
Type I errors ($n = 2000$) . . . 5
Type I errors ($n = 3000$) . . . 6
Power ($n = 500$) . . . 7
Power ($n = 1000$) . . . 8
Power ($n = 2000$) . . . 9
Power ($n = 3000$) . . . 10
Stratified sampling . . . 11
Type I errors ($n = 500$) . . . 11
Type I errors ($n = 1000$) . . . 12
Type I errors ($n = 2000$) . . . 13
Type I errors ($n = 3000$) . . . 14
Power ($n = 500$) . . . 15
Power ($n = 1000$) . . . 16
Power ($n = 2000$) . . . 17
Power ($n = 3000$) . . . 18
Cluster sampling . . . 19
Type I errors ($n = 500$) . . . 19
Type I errors ($n = 1000$) . . . 20
Type I errors ($n = 2000$) . . . 21
Type I errors ($n = 3000$) . . . 22
Power ($n = 500$) . . . 23
Power ($n = 1000$) . . . 24
Power ($n = 2000$) . . . 25
Power ($n = 3000$) . . . 26
Strat-clust sampling . . . 27
Type I errors ($n = 500$) . . . 27

Type I errors ($n = 1000$) 28
Type I errors ($n = 2000$) 29
Type I errors ($n = 3000$) 30
Power ($n = 500$) 31
Power ($n = 1000$) 32
Power ($n = 2000$) 33
Power ($n = 3000$) 34

Simple random sampling

Type I errors ($n = 500$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	2	0.087	0.046	0.010
WaldDiag,MM3	1000	1000	2	0.041	0.014	0.001
WaldVCF	1000	1000	2	0.083	0.046	0.010
PearsonRS	1000	1000	2	0.077	0.040	0.013
Pearson,MM3	1000	1000	2	0.079	0.038	0.010
RSS,MM3	1000	1000	2	0.073	0.041	0.010
Multn,MM3	1000	1000	2	0.078	0.042	0.008
1F 8V						
Wald	1000	1000	1	0.095	0.048	0.012
WaldDiag,MM3	1000	1000	1	0.053	0.022	0.002
WaldVCF	1000	1000	1	0.093	0.048	0.012
PearsonRS	1000	1000	1	0.096	0.043	0.012
Pearson,MM3	1000	1000	1	0.096	0.043	0.010
RSS,MM3	1000	1000	1	0.099	0.042	0.010
Multn,MM3	1000	1000	1	0.092	0.045	0.012
1F 15V						
Wald	1000	1000	7	0.116	0.056	0.012
WaldDiag,MM3	1000	1000	7	0.061	0.024	0.002
WaldVCF	1000	1000	7	0.114	0.055	0.012
PearsonRS	1000	1000	7	0.098	0.050	0.016
Pearson,MM3	1000	1000	7	0.097	0.047	0.014
RSS,MM3	1000	1000	7	0.099	0.044	0.012
Multn,MM3	1000	1000	7	0.111	0.055	0.012
2F 10V						
Wald	1000	1000	12	0.102	0.044	0.007
WaldDiag,MM3	1000	1000	12	0.026	0.008	0.001
WaldVCF	1000	1000	12	0.097	0.039	0.006
PearsonRS	1000	1000	12	0.086	0.038	0.013
Pearson,MM3	1000	1000	12	0.085	0.035	0.011
RSS,MM3	1000	1000	12	0.079	0.038	0.008
Multn,MM3	1000	1000	12	0.085	0.033	0.004
3F 15V						
Wald	1000	1000	33	0.114	0.066	0.014
WaldDiag,MM3	1000	1000	33	0.029	0.011	0.001
WaldVCF	1000	1000	33	0.108	0.056	0.012
PearsonRS	1000	1000	33	0.094	0.044	0.013
Pearson,MM3	1000	1000	33	0.090	0.039	0.010
RSS,MM3	1000	1000	33	0.091	0.047	0.009
Multn,MM3	1000	1000	33	0.102	0.046	0.009

Type I errors ($n = 1000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	0	0.085	0.038	0.004
WaldDiag,MM3	1000	1000	0	0.052	0.019	0.001
WaldVCF	1000	1000	0	0.083	0.037	0.004
PearsonRS	1000	1000	0	0.077	0.030	0.006
Pearson,MM3	1000	1000	0	0.077	0.027	0.005
RSS,MM3	1000	1000	0	0.076	0.026	0.003
Multn,MM3	1000	1000	0	0.077	0.037	0.002
1F 8V						
Wald	1000	1000	1	0.121	0.064	0.016
WaldDiag,MM3	1000	1000	1	0.081	0.038	0.005
WaldVCF	1000	1000	1	0.120	0.063	0.015
PearsonRS	1000	1000	1	0.107	0.047	0.008
Pearson,MM3	1000	1000	1	0.105	0.047	0.007
RSS,MM3	1000	1000	1	0.105	0.054	0.004
Multn,MM3	1000	1000	1	0.119	0.061	0.015
1F 15V						
Wald	1000	1000	14	0.107	0.047	0.009
WaldDiag,MM3	1000	1000	14	0.072	0.027	0.006
WaldVCF	1000	1000	14	0.106	0.046	0.009
PearsonRS	1000	1000	14	0.108	0.064	0.013
Pearson,MM3	1000	1000	14	0.107	0.062	0.010
RSS,MM3	1000	1000	14	0.112	0.057	0.011
Multn,MM3	1000	1000	14	0.105	0.045	0.009
2F 10V						
Wald	1000	1000	6	0.093	0.039	0.011
WaldDiag,MM3	1000	1000	6	0.051	0.016	0.001
WaldVCF	1000	1000	6	0.089	0.036	0.010
PearsonRS	1000	1000	6	0.094	0.053	0.007
Pearson,MM3	1000	1000	6	0.094	0.047	0.005
RSS,MM3	1000	1000	6	0.090	0.043	0.005
Multn,MM3	1000	1000	6	0.086	0.034	0.009
3F 15V						
Wald	1000	1000	21	0.092	0.046	0.008
WaldDiag,MM3	1000	1000	21	0.047	0.020	0.002
WaldVCF	1000	1000	21	0.083	0.042	0.008
PearsonRS	1000	1000	21	0.088	0.042	0.014
Pearson,MM3	1000	1000	21	0.086	0.040	0.013
RSS,MM3	1000	1000	21	0.084	0.039	0.007
Multn,MM3	1000	1000	21	0.079	0.041	0.007

Type I errors ($n = 2000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	1	0.089	0.042	0.010
WaldDiag,MM3	1000	1000	1	0.080	0.036	0.007
WaldVCF	1000	1000	1	0.089	0.041	0.009
PearsonRS	1000	1000	1	0.086	0.037	0.014
Pearson,MM3	1000	1000	1	0.088	0.035	0.011
RSS,MM3	1000	1000	1	0.083	0.038	0.011
Multn,MM3	1000	1000	1	0.088	0.040	0.009
1F 8V						
Wald	1000	1000	1	0.091	0.051	0.009
WaldDiag,MM3	1000	1000	1	0.083	0.038	0.006
WaldVCF	1000	1000	1	0.089	0.048	0.009
PearsonRS	1000	1000	1	0.102	0.055	0.019
Pearson,MM3	1000	1000	1	0.102	0.054	0.013
RSS,MM3	1000	1000	1	0.106	0.052	0.013
Multn,MM3	1000	1000	1	0.089	0.049	0.009
1F 15V						
Wald	1000	1000	22	0.100	0.060	0.013
WaldDiag,MM3	1000	1000	22	0.085	0.039	0.008
WaldVCF	1000	1000	22	0.097	0.058	0.013
PearsonRS	1000	1000	22	0.110	0.054	0.012
Pearson,MM3	1000	1000	22	0.107	0.054	0.012
RSS,MM3	1000	1000	22	0.104	0.052	0.013
Multn,MM3	1000	1000	22	0.096	0.058	0.013
2F 10V						
Wald	1000	1000	7	0.093	0.032	0.005
WaldDiag,MM3	1000	1000	7	0.064	0.024	0.006
WaldVCF	1000	1000	7	0.088	0.030	0.004
PearsonRS	1000	1000	7	0.075	0.036	0.009
Pearson,MM3	1000	1000	7	0.075	0.033	0.009
RSS,MM3	1000	1000	7	0.073	0.038	0.009
Multn,MM3	1000	1000	7	0.084	0.030	0.004
3F 15V						
Wald	1000	1000	50	0.110	0.054	0.007
WaldDiag,MM3	1000	1000	50	0.069	0.033	0.003
WaldVCF	1000	1000	50	0.096	0.050	0.006
PearsonRS	1000	1000	50	0.102	0.053	0.011
Pearson,MM3	1000	1000	50	0.100	0.050	0.007
RSS,MM3	1000	1000	50	0.094	0.052	0.010
Multn,MM3	1000	1000	50	0.095	0.049	0.006

Type I errors ($n = 3000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	1	0.085	0.035	0.003
WaldDiag,MM3	1000	1000	1	0.067	0.027	0.007
WaldVCF	1000	1000	1	0.083	0.035	0.003
PearsonRS	1000	1000	1	0.086	0.040	0.005
Pearson,MM3	1000	1000	1	0.086	0.039	0.004
RSS,MM3	1000	1000	1	0.082	0.033	0.003
Multn,MM3	1000	1000	1	0.082	0.035	0.002
1F 8V						
Wald	1000	1000	4	0.098	0.049	0.012
WaldDiag,MM3	1000	1000	4	0.088	0.043	0.006
WaldVCF	1000	1000	4	0.096	0.049	0.012
PearsonRS	1000	1000	4	0.095	0.047	0.012
Pearson,MM3	1000	1000	4	0.094	0.043	0.009
RSS,MM3	1000	1000	4	0.101	0.044	0.010
Multn,MM3	1000	1000	4	0.095	0.048	0.012
1F 15V						
Wald	1000	1000	15	0.092	0.045	0.012
WaldDiag,MM3	1000	1000	15	0.082	0.038	0.011
WaldVCF	1000	1000	15	0.090	0.043	0.011
PearsonRS	1000	1000	15	0.103	0.054	0.014
Pearson,MM3	1000	1000	15	0.102	0.052	0.013
RSS,MM3	1000	1000	15	0.102	0.050	0.011
Multn,MM3	1000	1000	15	0.090	0.043	0.012
2F 10V						
Wald	1000	1000	14	0.111	0.049	0.009
WaldDiag,MM3	1000	1000	14	0.089	0.040	0.010
WaldVCF	1000	1000	14	0.106	0.045	0.009
PearsonRS	1000	1000	14	0.075	0.047	0.010
Pearson,MM3	1000	1000	14	0.075	0.046	0.009
RSS,MM3	1000	1000	14	0.077	0.045	0.009
Multn,MM3	1000	1000	14	0.105	0.043	0.009
3F 15V						
Wald	1000	1000	49	0.133	0.063	0.019
WaldDiag,MM3	1000	1000	49	0.092	0.039	0.011
WaldVCF	1000	1000	49	0.117	0.055	0.019
PearsonRS	1000	1000	49	0.096	0.055	0.016
Pearson,MM3	1000	1000	49	0.092	0.051	0.012
RSS,MM3	1000	1000	49	0.107	0.054	0.009
Multn,MM3	1000	1000	49	0.114	0.055	0.019

Power ($n = 500$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	1	0.338	0.232	0.091
WaldDiag,MM3	1000	1000	1	0.153	0.071	0.012
WaldVCF	1000	1000	1	0.336	0.230	0.090
PearsonRS	1000	1000	1	0.346	0.242	0.100
Pearson,MM3	1000	1000	1	0.346	0.237	0.089
RSS,MM3	1000	1000	1	0.352	0.248	0.096
Multn,MM3	1000	1000	1	0.315	0.204	0.076
1F 8V						
Wald	1000	1000	2	0.833	0.750	0.553
WaldDiag,MM3	1000	1000	2	0.690	0.545	0.296
WaldVCF	1000	1000	2	0.831	0.748	0.552
PearsonRS	1000	1000	2	0.657	0.543	0.325
Pearson,MM3	1000	1000	2	0.656	0.533	0.302
RSS,MM3	1000	1000	2	0.722	0.600	0.365
Multn,MM3	1000	1000	2	0.827	0.738	0.535
1F 15V						
Wald	1000	1000	9	0.967	0.935	0.837
WaldDiag,MM3	1000	1000	9	0.919	0.878	0.738
WaldVCF	1000	1000	9	0.966	0.933	0.834
PearsonRS	1000	1000	9	0.917	0.867	0.708
Pearson,MM3	1000	1000	9	0.916	0.860	0.697
RSS,MM3	1000	1000	9	0.940	0.901	0.761
Multn,MM3	1000	1000	9	0.965	0.931	0.831
2F 10V						
Wald	1000	1000	9	0.224	0.148	0.034
WaldDiag,MM3	1000	1000	9	0.113	0.048	0.006
WaldVCF	1000	1000	9	0.209	0.139	0.031
PearsonRS	1000	1000	9	0.239	0.146	0.058
Pearson,MM3	1000	1000	9	0.234	0.138	0.046
RSS,MM3	1000	1000	9	0.247	0.153	0.053
Multn,MM3	1000	1000	9	0.193	0.122	0.027
3F 15V						
Wald	1000	1000	26	0.263	0.160	0.056
WaldDiag,MM3	1000	1000	26	0.140	0.075	0.010
WaldVCF	1000	1000	26	0.245	0.148	0.050
PearsonRS	1000	1000	26	0.258	0.173	0.080
Pearson,MM3	1000	1000	26	0.255	0.168	0.072
RSS,MM3	1000	1000	26	0.276	0.181	0.073
Multn,MM3	1000	1000	26	0.224	0.137	0.039

Power ($n = 1000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	2	0.525	0.409	0.192
WaldDiag,MM3	1000	1000	2	0.365	0.215	0.064
WaldVCF	1000	1000	2	0.521	0.406	0.191
PearsonRS	1000	1000	2	0.546	0.436	0.241
Pearson,MM3	1000	1000	2	0.548	0.433	0.229
RSS,MM3	1000	1000	2	0.562	0.444	0.250
Multn,MM3	1000	1000	2	0.513	0.399	0.188
1F 8V						
Wald	1000	1000	2	0.979	0.964	0.918
WaldDiag,MM3	1000	1000	2	0.965	0.928	0.808
WaldVCF	1000	1000	2	0.979	0.964	0.917
PearsonRS	1000	1000	2	0.924	0.883	0.741
Pearson,MM3	1000	1000	2	0.924	0.881	0.718
RSS,MM3	1000	1000	2	0.951	0.918	0.796
Multn,MM3	1000	1000	2	0.979	0.963	0.916
1F 15V						
Wald	1000	1000	9	1.000	0.998	0.994
WaldDiag,MM3	1000	1000	9	0.998	0.998	0.985
WaldVCF	1000	1000	9	1.000	0.998	0.994
PearsonRS	1000	1000	9	0.996	0.991	0.974
Pearson,MM3	1000	1000	9	0.996	0.991	0.970
RSS,MM3	1000	1000	9	0.997	0.994	0.986
Multn,MM3	1000	1000	9	1.000	0.998	0.994
2F 10V						
Wald	1000	1000	6	0.338	0.227	0.099
WaldDiag,MM3	1000	1000	6	0.270	0.182	0.067
WaldVCF	1000	1000	6	0.321	0.221	0.092
PearsonRS	1000	1000	6	0.397	0.301	0.163
Pearson,MM3	1000	1000	6	0.394	0.294	0.145
RSS,MM3	1000	1000	6	0.420	0.314	0.161
Multn,MM3	1000	1000	6	0.312	0.221	0.086
3F 15V						
Wald	1000	1000	35	0.403	0.289	0.123
WaldDiag,MM3	1000	1000	35	0.356	0.250	0.105
WaldVCF	1000	1000	35	0.382	0.267	0.113
PearsonRS	1000	1000	35	0.462	0.378	0.218
Pearson,MM3	1000	1000	35	0.461	0.373	0.205
RSS,MM3	1000	1000	35	0.501	0.381	0.229
Multn,MM3	1000	1000	35	0.372	0.264	0.113

Power ($n = 2000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	1	0.796	0.706	0.499
WaldDiag,MM3	1000	1000	1	0.682	0.542	0.281
WaldVCF	1000	1000	1	0.796	0.706	0.499
PearsonRS	1000	1000	1	0.820	0.731	0.542
Pearson,MM3	1000	1000	1	0.821	0.728	0.520
RSS,MM3	1000	1000	1	0.829	0.746	0.555
Multn,MM3	1000	1000	1	0.795	0.704	0.495
1F 8V						
Wald	1000	1000	7	1.000	1.000	0.998
WaldDiag,MM3	1000	1000	7	1.000	0.999	0.997
WaldVCF	1000	1000	7	1.000	1.000	0.998
PearsonRS	1000	1000	7	0.998	0.995	0.979
Pearson,MM3	1000	1000	7	0.998	0.995	0.971
RSS,MM3	1000	1000	7	0.999	0.999	0.989
Multn,MM3	1000	1000	7	1.000	1.000	0.998
1F 15V						
Wald	1000	1000	14	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	14	1.000	1.000	1.000
WaldVCF	1000	1000	14	1.000	1.000	1.000
PearsonRS	1000	1000	14	1.000	1.000	1.000
Pearson,MM3	1000	1000	14	1.000	1.000	1.000
RSS,MM3	1000	1000	14	1.000	1.000	1.000
Multn,MM3	1000	1000	14	1.000	1.000	1.000
2F 10V						
Wald	1000	1000	6	0.526	0.416	0.252
WaldDiag,MM3	1000	1000	6	0.512	0.419	0.222
WaldVCF	1000	1000	6	0.503	0.403	0.243
PearsonRS	1000	1000	6	0.616	0.517	0.351
Pearson,MM3	1000	1000	6	0.615	0.504	0.326
RSS,MM3	1000	1000	6	0.632	0.539	0.363
Multn,MM3	1000	1000	6	0.507	0.405	0.247
3F 15V						
Wald	1000	1000	41	0.678	0.567	0.372
WaldDiag,MM3	1000	1000	41	0.699	0.596	0.402
WaldVCF	1000	1000	41	0.663	0.555	0.352
PearsonRS	1000	1000	41	0.774	0.678	0.535
Pearson,MM3	1000	1000	41	0.770	0.671	0.511
RSS,MM3	1000	1000	41	0.787	0.720	0.546
Multn,MM3	1000	1000	41	0.667	0.554	0.355

Power ($n = 3000$)

	name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V							
	Wald	1000	1000	1	0.923	0.874	0.727
	WaldDiag,MM3	1000	1000	1	0.860	0.751	0.526
	WaldVCF	1000	1000	1	0.923	0.874	0.726
	PearsonRS	1000	1000	1	0.925	0.882	0.748
	Pearson,MM3	1000	1000	1	0.925	0.880	0.742
	RSS,MM3	1000	1000	1	0.937	0.898	0.768
	Multn,MM3	1000	1000	1	0.923	0.873	0.725
1F 8V							
	Wald	1000	1000	4	1.000	1.000	1.000
	WaldDiag,MM3	1000	1000	4	1.000	1.000	1.000
	WaldVCF	1000	1000	4	1.000	1.000	1.000
	PearsonRS	1000	1000	4	1.000	1.000	0.999
	Pearson,MM3	1000	1000	4	1.000	0.999	0.999
	RSS,MM3	1000	1000	4	1.000	1.000	0.999
	Multn,MM3	1000	1000	4	1.000	1.000	1.000
1F 15V							
	Wald	1000	1000	9	1.000	1.000	1.000
	WaldDiag,MM3	1000	1000	9	1.000	1.000	1.000
	WaldVCF	1000	1000	9	1.000	1.000	1.000
	PearsonRS	1000	1000	9	1.000	1.000	1.000
	Pearson,MM3	1000	1000	9	1.000	1.000	1.000
	RSS,MM3	1000	1000	9	1.000	1.000	1.000
	Multn,MM3	1000	1000	9	1.000	1.000	1.000
2F 10V							
	Wald	1000	1000	14	0.699	0.587	0.411
	WaldDiag,MM3	1000	1000	14	0.720	0.604	0.415
	WaldVCF	1000	1000	14	0.688	0.571	0.393
	PearsonRS	1000	1000	14	0.770	0.688	0.541
	Pearson,MM3	1000	1000	14	0.766	0.678	0.518
	RSS,MM3	1000	1000	14	0.794	0.716	0.561
	Multn,MM3	1000	1000	14	0.691	0.578	0.397
3F 15V							
	Wald	1000	1000	38	0.831	0.759	0.583
	WaldDiag,MM3	1000	1000	38	0.861	0.800	0.633
	WaldVCF	1000	1000	38	0.817	0.737	0.567
	PearsonRS	1000	1000	38	0.881	0.828	0.711
	Pearson,MM3	1000	1000	38	0.879	0.822	0.696
	RSS,MM3	1000	1000	38	0.905	0.856	0.733
	Multn,MM3	1000	1000	38	0.818	0.743	0.567

Stratified sampling

Type I errors ($n = 500$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	2	0.109	0.066	0.019
WaldDiag,MM3	1000	1000	2	0.061	0.032	0.001
WaldVCF	1000	1000	2	0.096	0.052	0.013
PearsonRS	1000	1000	2	0.093	0.051	0.008
Pearson,MM3	1000	1000	2	0.094	0.050	0.007
RSS,MM3	1000	1000	2	0.093	0.049	0.008
Multn,MM3	1000	1000	2	0.100	0.055	0.016
1F 8V						
Wald	1000	1000	5	0.214	0.122	0.051
WaldDiag,MM3	1000	1000	5	0.080	0.028	0.003
WaldVCF	1000	1000	5	0.135	0.072	0.014
PearsonRS	1000	1000	5	0.088	0.045	0.008
Pearson,MM3	1000	1000	5	0.088	0.043	0.006
RSS,MM3	1000	1000	5	0.082	0.042	0.006
Multn,MM3	1000	1000	5	0.189	0.104	0.040
1F 15V						
Wald	1000	1000	12	0.714	0.604	0.384
WaldDiag,MM3	1000	1000	12	0.055	0.026	0.002
WaldVCF	1000	1000	12	0.471	0.354	0.165
PearsonRS	1000	1000	12	0.081	0.035	0.004
Pearson,MM3	1000	1000	12	0.080	0.031	0.004
RSS,MM3	1000	1000	12	0.074	0.028	0.001
Multn,MM3	1000	1000	12	0.727	0.603	0.413
2F 10V						
Wald	1000	1000	13	0.235	0.159	0.068
WaldDiag,MM3	1000	1000	13	0.059	0.028	0.006
WaldVCF	1000	1000	13	0.176	0.105	0.037
PearsonRS	1000	1000	13	0.083	0.039	0.015
Pearson,MM3	1000	1000	13	0.083	0.037	0.011
RSS,MM3	1000	1000	13	0.088	0.035	0.013
Multn,MM3	1000	1000	13	0.240	0.165	0.070
3F 15V						
Wald	1000	1000	34	0.650	0.532	0.292
WaldDiag,MM3	1000	1000	34	0.068	0.024	0.003
WaldVCF	1000	1000	34	0.459	0.320	0.152
PearsonRS	1000	1000	34	0.075	0.041	0.010
Pearson,MM3	1000	1000	34	0.074	0.038	0.008
RSS,MM3	1000	1000	34	0.077	0.039	0.009
Multn,MM3	1000	1000	34	0.678	0.585	0.355

Type I errors ($n = 1000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	1	0.138	0.066	0.020
WaldDiag,MM3	1000	1000	1	0.070	0.029	0.002
WaldVCF	1000	1000	1	0.115	0.055	0.014
PearsonRS	1000	1000	1	0.090	0.043	0.010
Pearson,MM3	1000	1000	1	0.091	0.042	0.009
RSS,MM3	1000	1000	1	0.088	0.044	0.009
Multn,MM3	1000	1000	1	0.121	0.059	0.017
1F 8V						
Wald	1000	1000	7	0.196	0.128	0.042
WaldDiag,MM3	1000	1000	7	0.068	0.031	0.004
WaldVCF	1000	1000	7	0.140	0.076	0.015
PearsonRS	1000	1000	7	0.093	0.048	0.008
Pearson,MM3	1000	1000	7	0.093	0.043	0.007
RSS,MM3	1000	1000	7	0.086	0.043	0.005
Multn,MM3	1000	1000	7	0.183	0.114	0.031
1F 15V						
Wald	1000	1000	15	0.729	0.622	0.392
WaldDiag,MM3	1000	1000	15	0.062	0.021	0.001
WaldVCF	1000	1000	15	0.489	0.363	0.161
PearsonRS	1000	1000	15	0.082	0.039	0.007
Pearson,MM3	1000	1000	15	0.080	0.037	0.004
RSS,MM3	1000	1000	15	0.073	0.032	0.003
Multn,MM3	1000	1000	15	0.731	0.614	0.408
2F 10V						
Wald	1000	1000	8	0.241	0.152	0.059
WaldDiag,MM3	1000	1000	8	0.054	0.028	0.001
WaldVCF	1000	1000	8	0.167	0.098	0.026
PearsonRS	1000	1000	8	0.074	0.034	0.009
Pearson,MM3	1000	1000	8	0.073	0.032	0.007
RSS,MM3	1000	1000	8	0.079	0.035	0.008
Multn,MM3	1000	1000	8	0.246	0.154	0.062
3F 15V						
Wald	1000	1000	42	0.615	0.506	0.276
WaldDiag,MM3	1000	1000	42	0.060	0.022	0.001
WaldVCF	1000	1000	42	0.435	0.300	0.141
PearsonRS	1000	1000	42	0.075	0.039	0.008
Pearson,MM3	1000	1000	42	0.073	0.037	0.007
RSS,MM3	1000	1000	42	0.067	0.028	0.006
Multn,MM3	1000	1000	42	0.646	0.543	0.326

Type I errors ($n = 2000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	1	0.124	0.066	0.024
WaldDiag,MM3	1000	1000	1	0.061	0.031	0.006
WaldVCF	1000	1000	1	0.105	0.053	0.019
PearsonRS	1000	1000	1	0.078	0.043	0.017
Pearson,MM3	1000	1000	1	0.079	0.041	0.014
RSS,MM3	1000	1000	1	0.082	0.043	0.013
Multn,MM3	1000	1000	1	0.110	0.056	0.022
1F 8V						
Wald	1000	1000	0	0.204	0.129	0.037
WaldDiag,MM3	1000	1000	0	0.065	0.027	0.003
WaldVCF	1000	1000	0	0.141	0.073	0.014
PearsonRS	1000	1000	0	0.092	0.044	0.013
Pearson,MM3	1000	1000	0	0.091	0.042	0.009
RSS,MM3	1000	1000	0	0.091	0.045	0.008
Multn,MM3	1000	1000	0	0.191	0.114	0.030
1F 15V						
Wald	1000	1000	15	0.701	0.631	0.416
WaldDiag,MM3	1000	1000	15	0.074	0.026	0.002
WaldVCF	1000	1000	15	0.510	0.374	0.189
PearsonRS	1000	1000	15	0.084	0.037	0.010
Pearson,MM3	1000	1000	15	0.081	0.036	0.010
RSS,MM3	1000	1000	15	0.081	0.034	0.012
Multn,MM3	1000	1000	15	0.709	0.641	0.430
2F 10V						
Wald	1000	1000	12	0.221	0.147	0.050
WaldDiag,MM3	1000	1000	12	0.055	0.021	0.003
WaldVCF	1000	1000	12	0.152	0.088	0.033
PearsonRS	1000	1000	12	0.086	0.045	0.014
Pearson,MM3	1000	1000	12	0.086	0.044	0.007
RSS,MM3	1000	1000	12	0.081	0.044	0.010
Multn,MM3	1000	1000	12	0.228	0.150	0.057
3F 15V						
Wald	1000	1000	41	0.627	0.521	0.291
WaldDiag,MM3	1000	1000	41	0.072	0.024	0.003
WaldVCF	1000	1000	41	0.455	0.323	0.138
PearsonRS	1000	1000	41	0.082	0.040	0.006
Pearson,MM3	1000	1000	41	0.078	0.039	0.005
RSS,MM3	1000	1000	41	0.077	0.032	0.004
Multn,MM3	1000	1000	41	0.659	0.557	0.350

Type I errors ($n = 3000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	0	0.119	0.066	0.020
WaldDiag,MM3	1000	1000	0	0.069	0.030	0.002
WaldVCF	1000	1000	0	0.107	0.054	0.017
PearsonRS	1000	1000	0	0.097	0.053	0.011
Pearson,MM3	1000	1000	0	0.098	0.049	0.009
RSS,MM3	1000	1000	0	0.095	0.054	0.011
Multn,MM3	1000	1000	0	0.111	0.057	0.017
1F 8V						
Wald	1000	1000	4	0.202	0.127	0.041
WaldDiag,MM3	1000	1000	4	0.083	0.028	0.002
WaldVCF	1000	1000	4	0.138	0.077	0.012
PearsonRS	1000	1000	4	0.081	0.038	0.010
Pearson,MM3	1000	1000	4	0.081	0.035	0.007
RSS,MM3	1000	1000	4	0.081	0.034	0.005
Multn,MM3	1000	1000	4	0.179	0.110	0.028
1F 15V						
Wald	1000	1000	11	0.744	0.642	0.412
WaldDiag,MM3	1000	1000	11	0.073	0.024	0.003
WaldVCF	1000	1000	11	0.504	0.362	0.168
PearsonRS	1000	1000	11	0.091	0.041	0.005
Pearson,MM3	1000	1000	11	0.090	0.038	0.004
RSS,MM3	1000	1000	11	0.084	0.036	0.005
Multn,MM3	1000	1000	11	0.743	0.646	0.418
2F 10V						
Wald	1000	1000	16	0.256	0.167	0.058
WaldDiag,MM3	1000	1000	16	0.050	0.024	0.003
WaldVCF	1000	1000	16	0.175	0.101	0.028
PearsonRS	1000	1000	16	0.095	0.044	0.005
Pearson,MM3	1000	1000	16	0.093	0.041	0.002
RSS,MM3	1000	1000	16	0.095	0.039	0.005
Multn,MM3	1000	1000	16	0.256	0.168	0.067
3F 15V						
Wald	1000	1000	37	0.611	0.491	0.282
WaldDiag,MM3	1000	1000	37	0.055	0.017	0.002
WaldVCF	1000	1000	37	0.433	0.303	0.137
PearsonRS	1000	1000	37	0.080	0.038	0.006
Pearson,MM3	1000	1000	37	0.080	0.036	0.006
RSS,MM3	1000	1000	37	0.068	0.028	0.006
Multn,MM3	1000	1000	37	0.652	0.549	0.335

Power ($n = 500$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	0	0.472	0.339	0.171
WaldDiag,MM3	1000	1000	0	0.337	0.209	0.046
WaldVCF	1000	1000	0	0.438	0.319	0.130
PearsonRS	1000	1000	0	0.465	0.340	0.169
Pearson,MM3	1000	1000	0	0.466	0.337	0.154
RSS,MM3	1000	1000	0	0.473	0.344	0.165
Multn,MM3	1000	1000	0	0.432	0.312	0.130
1F 8V						
Wald	1000	1000	4	0.962	0.913	0.784
WaldDiag,MM3	1000	1000	4	0.905	0.829	0.601
WaldVCF	1000	1000	4	0.899	0.824	0.605
PearsonRS	1000	1000	4	0.759	0.646	0.410
Pearson,MM3	1000	1000	4	0.758	0.634	0.385
RSS,MM3	1000	1000	4	0.825	0.722	0.462
Multn,MM3	1000	1000	4	0.949	0.888	0.739
1F 15V						
Wald	1000	1000	14	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	14	1.000	0.994	0.983
WaldVCF	1000	1000	14	0.997	0.991	0.955
PearsonRS	1000	1000	14	0.986	0.976	0.898
Pearson,MM3	1000	1000	14	0.986	0.975	0.885
RSS,MM3	1000	1000	14	0.992	0.985	0.941
Multn,MM3	1000	1000	14	1.000	1.000	0.999
2F 10V						
Wald	1000	1000	7	0.763	0.663	0.456
WaldDiag,MM3	1000	1000	7	0.610	0.468	0.225
WaldVCF	1000	1000	7	0.647	0.522	0.297
PearsonRS	1000	1000	7	0.780	0.686	0.463
Pearson,MM3	1000	1000	7	0.778	0.672	0.409
RSS,MM3	1000	1000	7	0.781	0.675	0.440
Multn,MM3	1000	1000	7	0.744	0.628	0.416
3F 15V						
Wald	1000	1000	32	0.953	0.913	0.783
WaldDiag,MM3	1000	1000	32	0.673	0.525	0.255
WaldVCF	1000	1000	32	0.872	0.784	0.574
PearsonRS	1000	1000	32	0.792	0.678	0.462
Pearson,MM3	1000	1000	32	0.791	0.673	0.443
RSS,MM3	1000	1000	32	0.807	0.699	0.468
Multn,MM3	1000	1000	32	0.958	0.927	0.812

Power ($n = 1000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	1	0.479	0.345	0.153
WaldDiag,MM3	1000	1000	1	0.319	0.194	0.058
WaldVCF	1000	1000	1	0.445	0.300	0.121
PearsonRS	1000	1000	1	0.473	0.343	0.156
Pearson,MM3	1000	1000	1	0.473	0.342	0.146
RSS,MM3	1000	1000	1	0.486	0.351	0.152
Multn,MM3	1000	1000	1	0.443	0.302	0.118
1F 8V						
Wald	1000	1000	2	0.954	0.913	0.782
WaldDiag,MM3	1000	1000	2	0.906	0.816	0.613
WaldVCF	1000	1000	2	0.905	0.824	0.625
PearsonRS	1000	1000	2	0.772	0.670	0.405
Pearson,MM3	1000	1000	2	0.771	0.663	0.374
RSS,MM3	1000	1000	2	0.824	0.732	0.473
Multn,MM3	1000	1000	2	0.942	0.888	0.743
1F 15V						
Wald	1000	1000	10	1.000	1.000	0.997
WaldDiag,MM3	1000	1000	10	0.998	0.997	0.983
WaldVCF	1000	1000	10	0.992	0.988	0.946
PearsonRS	1000	1000	10	0.986	0.972	0.894
Pearson,MM3	1000	1000	10	0.986	0.969	0.879
RSS,MM3	1000	1000	10	0.991	0.984	0.934
Multn,MM3	1000	1000	10	1.000	1.000	0.996
2F 10V						
Wald	1000	1000	11	0.769	0.648	0.477
WaldDiag,MM3	1000	1000	11	0.618	0.476	0.208
WaldVCF	1000	1000	11	0.640	0.537	0.314
PearsonRS	1000	1000	11	0.797	0.686	0.463
Pearson,MM3	1000	1000	11	0.796	0.674	0.415
RSS,MM3	1000	1000	11	0.796	0.689	0.444
Multn,MM3	1000	1000	11	0.740	0.623	0.429
3F 15V						
Wald	1000	1000	30	0.953	0.917	0.802
WaldDiag,MM3	1000	1000	30	0.683	0.544	0.256
WaldVCF	1000	1000	30	0.880	0.811	0.593
PearsonRS	1000	1000	30	0.791	0.688	0.469
Pearson,MM3	1000	1000	30	0.788	0.675	0.443
RSS,MM3	1000	1000	30	0.812	0.701	0.482
Multn,MM3	1000	1000	30	0.958	0.927	0.830

Power ($n = 2000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	1	0.496	0.372	0.173
WaldDiag,MM3	1000	1000	1	0.364	0.230	0.069
WaldVCF	1000	1000	1	0.470	0.339	0.147
PearsonRS	1000	1000	1	0.504	0.375	0.187
Pearson,MM3	1000	1000	1	0.506	0.374	0.176
RSS,MM3	1000	1000	1	0.518	0.374	0.179
Multn,MM3	1000	1000	1	0.466	0.338	0.145
1F 8V						
Wald	1000	1000	4	0.950	0.919	0.805
WaldDiag,MM3	1000	1000	4	0.908	0.834	0.630
WaldVCF	1000	1000	4	0.914	0.842	0.624
PearsonRS	1000	1000	4	0.796	0.662	0.432
Pearson,MM3	1000	1000	4	0.794	0.652	0.396
RSS,MM3	1000	1000	4	0.848	0.751	0.493
Multn,MM3	1000	1000	4	0.938	0.897	0.760
1F 15V						
Wald	1000	1000	11	1.000	1.000	0.998
WaldDiag,MM3	1000	1000	11	0.998	0.995	0.979
WaldVCF	1000	1000	11	0.996	0.988	0.951
PearsonRS	1000	1000	11	0.987	0.969	0.879
Pearson,MM3	1000	1000	11	0.987	0.967	0.864
RSS,MM3	1000	1000	11	0.995	0.984	0.927
Multn,MM3	1000	1000	11	1.000	1.000	0.996
2F 10V						
Wald	1000	1000	10	0.801	0.697	0.476
WaldDiag,MM3	1000	1000	10	0.650	0.499	0.225
WaldVCF	1000	1000	10	0.682	0.556	0.335
PearsonRS	1000	1000	10	0.793	0.691	0.495
Pearson,MM3	1000	1000	10	0.793	0.683	0.464
RSS,MM3	1000	1000	10	0.803	0.706	0.487
Multn,MM3	1000	1000	10	0.775	0.664	0.442
3F 15V						
Wald	1000	1000	36	0.957	0.912	0.801
WaldDiag,MM3	1000	1000	36	0.692	0.544	0.254
WaldVCF	1000	1000	36	0.870	0.800	0.601
PearsonRS	1000	1000	36	0.801	0.700	0.479
Pearson,MM3	1000	1000	36	0.798	0.690	0.449
RSS,MM3	1000	1000	36	0.820	0.713	0.489
Multn,MM3	1000	1000	36	0.957	0.921	0.827

Power ($n = 3000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	0	0.483	0.362	0.168
WaldDiag,MM3	1000	1000	0	0.331	0.204	0.056
WaldVCF	1000	1000	0	0.457	0.324	0.134
PearsonRS	1000	1000	0	0.478	0.364	0.170
Pearson,MM3	1000	1000	0	0.478	0.361	0.159
RSS,MM3	1000	1000	0	0.484	0.365	0.166
Multn,MM3	1000	1000	0	0.449	0.327	0.131
1F 8V						
Wald	1000	1000	3	0.959	0.928	0.785
WaldDiag,MM3	1000	1000	3	0.915	0.838	0.613
WaldVCF	1000	1000	3	0.913	0.841	0.613
PearsonRS	1000	1000	3	0.761	0.647	0.410
Pearson,MM3	1000	1000	3	0.759	0.641	0.381
RSS,MM3	1000	1000	3	0.825	0.724	0.457
Multn,MM3	1000	1000	3	0.950	0.909	0.750
1F 15V						
Wald	1000	1000	7	1.000	1.000	0.997
WaldDiag,MM3	1000	1000	7	0.999	0.994	0.988
WaldVCF	1000	1000	7	0.997	0.993	0.964
PearsonRS	1000	1000	7	0.980	0.967	0.895
Pearson,MM3	1000	1000	7	0.980	0.965	0.887
RSS,MM3	1000	1000	7	0.992	0.984	0.933
Multn,MM3	1000	1000	7	1.000	1.000	0.997
2F 10V						
Wald	1000	1000	6	0.761	0.675	0.463
WaldDiag,MM3	1000	1000	6	0.623	0.463	0.212
WaldVCF	1000	1000	6	0.653	0.527	0.311
PearsonRS	1000	1000	6	0.773	0.668	0.463
Pearson,MM3	1000	1000	6	0.772	0.657	0.431
RSS,MM3	1000	1000	6	0.781	0.681	0.449
Multn,MM3	1000	1000	6	0.737	0.640	0.420
3F 15V						
Wald	1000	1000	42	0.954	0.920	0.797
WaldDiag,MM3	1000	1000	42	0.674	0.526	0.269
WaldVCF	1000	1000	42	0.885	0.798	0.604
PearsonRS	1000	1000	42	0.774	0.684	0.474
Pearson,MM3	1000	1000	42	0.772	0.678	0.450
RSS,MM3	1000	1000	42	0.793	0.700	0.483
Multn,MM3	1000	1000	42	0.963	0.933	0.828

Cluster sampling

Type I errors ($n = 500$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	999	999	7	0.715	0.651	0.533
WaldDiag,MM3	999	999	7	0.048	0.020	0.004
WaldVCF	999	999	7	0.210	0.133	0.059
PearsonRS	999	999	7	0.079	0.036	0.009
Pearson,MM3	999	999	7	0.080	0.035	0.007
RSS,MM3	999	999	7	0.069	0.031	0.005
Multn,MM3	999	999	7	0.167	0.087	0.027
1F 8V						
Wald	1000	1000	1000	1.000	1.000	0.999
WaldDiag,MM3	1000	1000	1000	0.036	0.010	0.000
WaldVCF	1000	1000	1000	0.997	0.996	0.988
PearsonRS	1000	1000	1000	0.053	0.020	0.005
Pearson,MM3	1000	1000	1000	0.053	0.019	0.001
RSS,MM3	1000	1000	1000	0.044	0.014	0.001
Multn,MM3	1000	1000	1000	0.321	0.207	0.088
1F 15V						
Wald	1000	1000	1000	0.996	0.996	0.982
WaldDiag,MM3	1000	1000	1000	0.007	0.001	0.000
WaldVCF	1000	1000	1000	0.022	0.017	0.014
PearsonRS	1000	1000	1000	0.003	0.000	0.000
Pearson,MM3	1000	1000	1000	0.003	0.000	0.000
RSS,MM3	1000	1000	1000	0.001	0.000	0.000
Multn,MM3	1000	1000	1000	0.011	0.003	0.000
2F 10V						
Wald	1000	1000	1000	1.000	1.000	0.997
WaldDiag,MM3	1000	1000	1000	0.022	0.006	0.000
WaldVCF	1000	1000	1000	0.764	0.721	0.641
PearsonRS	1000	1000	1000	0.033	0.014	0.002
Pearson,MM3	1000	1000	1000	0.033	0.012	0.001
RSS,MM3	1000	1000	1000	0.023	0.006	0.000
Multn,MM3	1000	1000	1000	0.070	0.037	0.013
3F 15V						
Wald	1000	1000	1000			
WaldDiag,MM3	1000	1000	1000	0.003	0.000	0.000
WaldVCF	1000	1000	1000	0.002	0.001	0.001
PearsonRS	1000	1000	1000	0.007	0.000	0.000
Pearson,MM3	1000	1000	1000	0.007	0.000	0.000
RSS,MM3	1000	1000	1000	0.002	0.000	0.000
Multn,MM3	1000	1000	1000	0.000	0.000	0.000

Type I errors ($n = 1000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	1	0.393	0.308	0.171
WaldDiag,MM3	1000	1000	1	0.082	0.029	0.001
WaldVCF	1000	1000	1	0.169	0.086	0.023
PearsonRS	1000	1000	1	0.107	0.047	0.007
Pearson,MM3	1000	1000	1	0.107	0.045	0.004
RSS,MM3	1000	1000	1	0.099	0.040	0.004
Multn,MM3	1000	1000	1	0.178	0.103	0.031
1F 8V						
Wald	1000	1000	8	0.989	0.985	0.966
WaldDiag,MM3	1000	1000	8	0.063	0.020	0.001
WaldVCF	1000	1000	8	0.716	0.627	0.420
PearsonRS	1000	1000	8	0.067	0.027	0.008
Pearson,MM3	1000	1000	8	0.067	0.027	0.007
RSS,MM3	1000	1000	8	0.058	0.022	0.002
Multn,MM3	1000	1000	8	0.388	0.265	0.098
1F 15V						
Wald	1000	1000	1000	1.000	0.999	0.999
WaldDiag,MM3	1000	1000	1000	0.011	0.002	0.000
WaldVCF	1000	1000	1000	0.761	0.725	0.640
PearsonRS	1000	1000	1000	0.019	0.003	0.000
Pearson,MM3	1000	1000	1000	0.018	0.003	0.000
RSS,MM3	1000	1000	1000	0.013	0.002	0.000
Multn,MM3	1000	1000	1000	0.215	0.148	0.065
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.036	0.010	0.000
WaldVCF	1000	1000	1000	0.996	0.993	0.978
PearsonRS	1000	1000	1000	0.065	0.030	0.001
Pearson,MM3	1000	1000	1000	0.064	0.025	0.000
RSS,MM3	1000	1000	1000	0.060	0.018	0.000
Multn,MM3	1000	1000	1000	0.523	0.398	0.182
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.016	0.004	0.000
WaldVCF	1000	1000	1000	0.404	0.344	0.254
PearsonRS	1000	1000	1000	0.024	0.008	0.001
Pearson,MM3	1000	1000	1000	0.023	0.007	0.000
RSS,MM3	1000	1000	1000	0.014	0.003	0.000
Multn,MM3	1000	1000	1000	0.074	0.041	0.015

Type I errors ($n = 2000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	0	0.243	0.158	0.062
WaldDiag,MM3	1000	1000	0	0.092	0.035	0.001
WaldVCF	1000	1000	0	0.142	0.065	0.021
PearsonRS	1000	1000	0	0.099	0.050	0.013
Pearson,MM3	1000	1000	0	0.099	0.049	0.011
RSS,MM3	1000	1000	0	0.106	0.048	0.009
Multn,MM3	1000	1000	0	0.152	0.087	0.027
1F 8V						
Wald	1000	1000	5	0.820	0.756	0.614
WaldDiag,MM3	1000	1000	5	0.086	0.029	0.002
WaldVCF	1000	1000	5	0.352	0.249	0.119
PearsonRS	1000	1000	5	0.073	0.039	0.007
Pearson,MM3	1000	1000	5	0.073	0.036	0.006
RSS,MM3	1000	1000	5	0.080	0.032	0.003
Multn,MM3	1000	1000	5	0.466	0.356	0.161
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.038	0.005	0.000
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.050	0.020	0.003
Pearson,MM3	1000	1000	1000	0.047	0.019	0.001
RSS,MM3	1000	1000	1000	0.041	0.011	0.000
Multn,MM3	1000	1000	1000	0.916	0.851	0.634
2F 10V						
Wald	1000	1000	28	0.970	0.958	0.903
WaldDiag,MM3	1000	1000	28	0.045	0.019	0.002
WaldVCF	1000	1000	28	0.747	0.637	0.428
PearsonRS	1000	1000	28	0.073	0.029	0.005
Pearson,MM3	1000	1000	28	0.073	0.027	0.004
RSS,MM3	1000	1000	28	0.062	0.023	0.003
Multn,MM3	1000	1000	28	0.702	0.567	0.306
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.040	0.009	0.000
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.055	0.027	0.002
Pearson,MM3	1000	1000	1000	0.052	0.025	0.001
RSS,MM3	1000	1000	1000	0.044	0.016	0.000
Multn,MM3	1000	1000	1000	0.894	0.807	0.566

Type I errors ($n = 3000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	1	0.181	0.111	0.028
WaldDiag,MM3	1000	1000	1	0.079	0.032	0.006
WaldVCF	1000	1000	1	0.127	0.065	0.009
PearsonRS	1000	1000	1	0.086	0.040	0.008
Pearson,MM3	1000	1000	1	0.088	0.039	0.008
RSS,MM3	1000	1000	1	0.099	0.037	0.006
Multn,MM3	1000	1000	1	0.131	0.080	0.010
1F 8V						
Wald	1000	1000	2	0.556	0.452	0.282
WaldDiag,MM3	1000	1000	2	0.065	0.031	0.006
WaldVCF	1000	1000	2	0.231	0.134	0.044
PearsonRS	1000	1000	2	0.087	0.043	0.016
Pearson,MM3	1000	1000	2	0.087	0.042	0.013
RSS,MM3	1000	1000	2	0.089	0.038	0.010
Multn,MM3	1000	1000	2	0.319	0.226	0.087
1F 15V						
Wald	1000	1000	143	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	143	0.045	0.015	0.001
WaldVCF	1000	1000	143	1.000	1.000	1.000
PearsonRS	1000	1000	143	0.054	0.026	0.005
Pearson,MM3	1000	1000	143	0.053	0.024	0.003
RSS,MM3	1000	1000	143	0.049	0.016	0.001
Multn,MM3	1000	1000	143	0.916	0.817	0.570
2F 10V						
Wald	1000	1000	26	0.824	0.744	0.588
WaldDiag,MM3	1000	1000	26	0.068	0.026	0.003
WaldVCF	1000	1000	26	0.495	0.374	0.185
PearsonRS	1000	1000	26	0.074	0.032	0.006
Pearson,MM3	1000	1000	26	0.074	0.028	0.005
RSS,MM3	1000	1000	26	0.067	0.025	0.003
Multn,MM3	1000	1000	26	0.586	0.459	0.247
3F 15V						
Wald	1000	1000	211	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	211	0.058	0.020	0.001
WaldVCF	1000	1000	211	1.000	1.000	0.998
PearsonRS	1000	1000	211	0.061	0.025	0.001
Pearson,MM3	1000	1000	211	0.059	0.022	0.001
RSS,MM3	1000	1000	211	0.049	0.014	0.001
Multn,MM3	1000	1000	211	0.944	0.866	0.673

Power ($n = 500$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	2	0.814	0.756	0.645
WaldDiag,MM3	1000	1000	2	0.157	0.069	0.006
WaldVCF	1000	1000	2	0.404	0.302	0.156
PearsonRS	1000	1000	2	0.249	0.140	0.042
Pearson,MM3	1000	1000	2	0.253	0.135	0.036
RSS,MM3	1000	1000	2	0.258	0.134	0.037
Multn,MM3	1000	1000	2	0.313	0.204	0.075
1F 8V						
Wald	1000	1000	1000	1.000	1.000	0.999
WaldDiag,MM3	1000	1000	1000	0.433	0.232	0.044
WaldVCF	1000	1000	1000	1.000	1.000	0.994
PearsonRS	1000	1000	1000	0.363	0.217	0.057
Pearson,MM3	1000	1000	1000	0.364	0.205	0.045
RSS,MM3	1000	1000	1000	0.384	0.213	0.036
Multn,MM3	1000	1000	1000	0.519	0.375	0.196
1F 15V						
Wald	1000	1000	1000	0.997	0.995	0.967
WaldDiag,MM3	1000	1000	1000	0.596	0.298	0.031
WaldVCF	1000	1000	1000	0.051	0.046	0.037
PearsonRS	1000	1000	1000	0.481	0.235	0.043
Pearson,MM3	1000	1000	1000	0.480	0.218	0.029
RSS,MM3	1000	1000	1000	0.486	0.206	0.011
Multn,MM3	1000	1000	1000	0.044	0.024	0.006
2F 10V						
Wald	1000	1000	1000	1.000	1.000	0.998
WaldDiag,MM3	1000	1000	1000	0.135	0.042	0.003
WaldVCF	1000	1000	1000	0.855	0.820	0.733
PearsonRS	1000	1000	1000	0.297	0.151	0.037
Pearson,MM3	1000	1000	1000	0.298	0.141	0.024
RSS,MM3	1000	1000	1000	0.251	0.103	0.014
Multn,MM3	1000	1000	1000	0.194	0.107	0.028
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.081	0.017	0.000
WaldVCF	1000	1000	1000	0.001	0.001	0.001
PearsonRS	1000	1000	1000	0.175	0.070	0.004
Pearson,MM3	1000	1000	1000	0.174	0.066	0.004
RSS,MM3	1000	1000	1000	0.132	0.031	0.000
Multn,MM3	1000	1000	1000	0.010	0.001	0.001

Power ($n = 1000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	0	0.730	0.632	0.448
WaldDiag,MM3	1000	1000	0	0.339	0.219	0.058
WaldVCF	1000	1000	0	0.497	0.371	0.191
PearsonRS	1000	1000	0	0.500	0.371	0.179
Pearson,MM3	1000	1000	0	0.501	0.366	0.165
RSS,MM3	1000	1000	0	0.507	0.361	0.156
Multn,MM3	1000	1000	0	0.494	0.358	0.178
1F 8V						
Wald	1000	1000	8	1.000	1.000	0.999
WaldDiag,MM3	1000	1000	8	0.900	0.796	0.494
WaldVCF	1000	1000	8	0.988	0.972	0.914
PearsonRS	1000	1000	8	0.802	0.682	0.428
Pearson,MM3	1000	1000	8	0.802	0.675	0.380
RSS,MM3	1000	1000	8	0.843	0.726	0.419
Multn,MM3	1000	1000	8	0.881	0.800	0.562
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.990	0.965	0.762
WaldVCF	1000	1000	1000	0.952	0.935	0.902
PearsonRS	1000	1000	1000	0.977	0.932	0.714
Pearson,MM3	1000	1000	1000	0.977	0.928	0.680
RSS,MM3	1000	1000	1000	0.981	0.944	0.703
Multn,MM3	1000	1000	1000	0.822	0.722	0.509
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.607	0.388	0.089
WaldVCF	1000	1000	1000	1.000	0.998	0.994
PearsonRS	1000	1000	1000	0.761	0.648	0.408
Pearson,MM3	1000	1000	1000	0.759	0.634	0.361
RSS,MM3	1000	1000	1000	0.756	0.620	0.343
Multn,MM3	1000	1000	1000	0.811	0.652	0.394
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.561	0.313	0.044
WaldVCF	1000	1000	1000	0.713	0.656	0.561
PearsonRS	1000	1000	1000	0.728	0.570	0.236
Pearson,MM3	1000	1000	1000	0.727	0.554	0.196
RSS,MM3	1000	1000	1000	0.721	0.518	0.162
Multn,MM3	1000	1000	1000	0.450	0.314	0.143

Power ($n = 2000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	0	0.854	0.783	0.605
WaldDiag,MM3	1000	1000	0	0.713	0.572	0.298
WaldVCF	1000	1000	0	0.773	0.686	0.433
PearsonRS	1000	1000	0	0.806	0.711	0.507
Pearson,MM3	1000	1000	0	0.810	0.709	0.484
RSS,MM3	1000	1000	0	0.812	0.716	0.492
Multn,MM3	1000	1000	0	0.791	0.697	0.460
1F 8V						
Wald	1000	1000	5	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	5	0.997	0.995	0.967
WaldVCF	1000	1000	5	1.000	0.998	0.985
PearsonRS	1000	1000	5	0.991	0.978	0.918
Pearson,MM3	1000	1000	5	0.991	0.978	0.897
RSS,MM3	1000	1000	5	0.999	0.990	0.941
Multn,MM3	1000	1000	5	1.000	0.999	0.992
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	1.000	1.000	1.000
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	1.000	1.000	1.000
Pearson,MM3	1000	1000	1000	1.000	1.000	1.000
RSS,MM3	1000	1000	1000	1.000	1.000	1.000
Multn,MM3	1000	1000	1000	1.000	1.000	0.997
2F 10V						
Wald	1000	1000	21	1.000	1.000	0.999
WaldDiag,MM3	1000	1000	21	0.964	0.919	0.737
WaldVCF	1000	1000	21	0.996	0.991	0.967
PearsonRS	1000	1000	21	0.988	0.973	0.908
Pearson,MM3	1000	1000	21	0.988	0.969	0.891
RSS,MM3	1000	1000	21	0.988	0.976	0.899
Multn,MM3	1000	1000	21	0.989	0.973	0.917
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.971	0.940	0.720
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.993	0.978	0.930
Pearson,MM3	1000	1000	1000	0.992	0.978	0.909
RSS,MM3	1000	1000	1000	0.990	0.985	0.912
Multn,MM3	1000	1000	1000	0.999	0.994	0.969

Power ($n = 3000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	0	0.953	0.903	0.764
WaldDiag,MM3	1000	1000	0	0.895	0.797	0.534
WaldVCF	1000	1000	0	0.922	0.870	0.672
PearsonRS	1000	1000	0	0.947	0.894	0.773
Pearson,MM3	1000	1000	0	0.948	0.893	0.757
RSS,MM3	1000	1000	0	0.947	0.894	0.770
Multn,MM3	1000	1000	0	0.931	0.871	0.684
1F 8V						
Wald	1000	1000	1	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1	1.000	1.000	1.000
WaldVCF	1000	1000	1	1.000	1.000	1.000
PearsonRS	1000	1000	1	1.000	1.000	1.000
Pearson,MM3	1000	1000	1	1.000	1.000	0.998
RSS,MM3	1000	1000	1	1.000	1.000	1.000
Multn,MM3	1000	1000	1	1.000	1.000	1.000
1F 15V						
Wald	1000	1000	70	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	70	1.000	1.000	1.000
WaldVCF	1000	1000	70	1.000	1.000	1.000
PearsonRS	1000	1000	70	1.000	1.000	1.000
Pearson,MM3	1000	1000	70	1.000	1.000	1.000
RSS,MM3	1000	1000	70	1.000	1.000	1.000
Multn,MM3	1000	1000	70	1.000	1.000	1.000
2F 10V						
Wald	1000	1000	18	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	18	1.000	0.997	0.973
WaldVCF	1000	1000	18	1.000	0.999	0.992
PearsonRS	1000	1000	18	1.000	1.000	0.998
Pearson,MM3	1000	1000	18	1.000	1.000	0.994
RSS,MM3	1000	1000	18	1.000	1.000	0.998
Multn,MM3	1000	1000	18	1.000	0.998	0.995
3F 15V						
Wald	1000	1000	160	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	160	1.000	1.000	0.988
WaldVCF	1000	1000	160	1.000	1.000	1.000
PearsonRS	1000	1000	160	1.000	1.000	0.996
Pearson,MM3	1000	1000	160	1.000	1.000	0.996
RSS,MM3	1000	1000	160	1.000	1.000	0.998
Multn,MM3	1000	1000	160	1.000	0.999	0.982

Strat-clust sampling

Type I errors ($n = 500$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	6	0.775	0.705	0.591
WaldDiag,MM3	1000	1000	6	0.065	0.019	0.003
WaldVCF	1000	1000	6	0.301	0.217	0.124
PearsonRS	1000	1000	6	0.071	0.024	0.002
Pearson,MM3	1000	1000	6	0.072	0.023	0.000
RSS,MM3	1000	1000	6	0.071	0.019	0.000
Multn,MM3	1000	1000	6	0.166	0.096	0.035
1F 8V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.080	0.033	0.003
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.049	0.018	0.000
Pearson,MM3	1000	1000	1000	0.051	0.016	0.000
RSS,MM3	1000	1000	1000	0.044	0.011	0.000
Multn,MM3	1000	1000	1000	0.245	0.163	0.078
1F 15V						
Wald	1000	1000	1000			
WaldDiag,MM3	1000	1000	1000	0.028	0.005	0.000
WaldVCF	1000	1000	1000	0.129	0.115	0.091
PearsonRS	1000	1000	1000	0.009	0.000	0.000
Pearson,MM3	1000	1000	1000	0.009	0.000	0.000
RSS,MM3	1000	1000	1000	0.005	0.000	0.000
Multn,MM3	1000	1000	1000	0.015	0.005	0.001
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.037	0.006	0.000
WaldVCF	1000	1000	1000	0.965	0.958	0.938
PearsonRS	1000	1000	1000	0.027	0.011	0.001
Pearson,MM3	1000	1000	1000	0.027	0.010	0.000
RSS,MM3	1000	1000	1000	0.019	0.006	0.000
Multn,MM3	1000	1000	1000	0.118	0.065	0.019
3F 15V						
Wald	1000	1000	1000			
WaldDiag,MM3	1000	1000	1000	0.011	0.001	0.000
WaldVCF	1000	1000	1000	0.016	0.009	0.006
PearsonRS	1000	1000	1000	0.008	0.002	0.000
Pearson,MM3	1000	1000	1000	0.008	0.002	0.000
RSS,MM3	1000	1000	1000	0.005	0.001	0.000
Multn,MM3	1000	1000	1000	0.007	0.001	0.000

Type I errors ($n = 1000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	2	0.377	0.290	0.162
WaldDiag,MM3	1000	1000	2	0.091	0.042	0.004
WaldVCF	1000	1000	2	0.196	0.127	0.039
PearsonRS	1000	1000	2	0.099	0.047	0.012
Pearson,MM3	1000	1000	2	0.100	0.044	0.011
RSS,MM3	1000	1000	2	0.105	0.040	0.008
Multn,MM3	1000	1000	2	0.179	0.109	0.039
1F 8V						
Wald	1000	1000	12	0.995	0.995	0.992
WaldDiag,MM3	1000	1000	12	0.077	0.033	0.003
WaldVCF	1000	1000	12	0.863	0.808	0.685
PearsonRS	1000	1000	12	0.058	0.029	0.007
Pearson,MM3	1000	1000	12	0.058	0.027	0.006
RSS,MM3	1000	1000	12	0.048	0.021	0.005
Multn,MM3	1000	1000	12	0.388	0.272	0.119
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.033	0.008	0.000
WaldVCF	1000	1000	1000	1.000	1.000	0.998
PearsonRS	1000	1000	1000	0.014	0.004	0.000
Pearson,MM3	1000	1000	1000	0.014	0.004	0.000
RSS,MM3	1000	1000	1000	0.012	0.002	0.000
Multn,MM3	1000	1000	1000	0.338	0.212	0.080
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.050	0.012	0.001
WaldVCF	1000	1000	1000	0.999	0.999	0.998
PearsonRS	1000	1000	1000	0.059	0.019	0.001
Pearson,MM3	1000	1000	1000	0.058	0.018	0.001
RSS,MM3	1000	1000	1000	0.050	0.014	0.001
Multn,MM3	1000	1000	1000	0.458	0.320	0.161
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.027	0.000	0.000
WaldVCF	1000	1000	1000	0.983	0.978	0.956
PearsonRS	1000	1000	1000	0.018	0.005	0.000
Pearson,MM3	1000	1000	1000	0.017	0.004	0.000
RSS,MM3	1000	1000	1000	0.009	0.003	0.000
Multn,MM3	1000	1000	1000	0.208	0.122	0.042

Type I errors ($n = 2000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	3	0.221	0.142	0.053
WaldDiag,MM3	1000	1000	3	0.087	0.042	0.012
WaldVCF	1000	1000	3	0.140	0.078	0.025
PearsonRS	1000	1000	3	0.091	0.051	0.012
Pearson,MM3	1000	1000	3	0.093	0.050	0.011
RSS,MM3	1000	1000	3	0.091	0.045	0.011
Multn,MM3	1000	1000	3	0.139	0.072	0.026
1F 8V						
Wald	1000	1000	0	0.782	0.710	0.556
WaldDiag,MM3	1000	1000	0	0.078	0.031	0.004
WaldVCF	1000	1000	0	0.485	0.405	0.220
PearsonRS	1000	1000	0	0.083	0.034	0.007
Pearson,MM3	1000	1000	0	0.083	0.030	0.006
RSS,MM3	1000	1000	0	0.081	0.029	0.004
Multn,MM3	1000	1000	0	0.426	0.309	0.135
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.030	0.010	0.000
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.043	0.009	0.001
Pearson,MM3	1000	1000	1000	0.041	0.008	0.000
RSS,MM3	1000	1000	1000	0.031	0.006	0.000
Multn,MM3	1000	1000	1000	0.852	0.747	0.492
2F 10V						
Wald	1000	1000	28	0.988	0.974	0.941
WaldDiag,MM3	1000	1000	28	0.053	0.014	0.000
WaldVCF	1000	1000	28	0.871	0.820	0.665
PearsonRS	1000	1000	28	0.065	0.029	0.005
Pearson,MM3	1000	1000	28	0.064	0.026	0.004
RSS,MM3	1000	1000	28	0.057	0.021	0.003
Multn,MM3	1000	1000	28	0.675	0.539	0.317
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.042	0.012	0.001
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.051	0.015	0.001
Pearson,MM3	1000	1000	1000	0.048	0.014	0.001
RSS,MM3	1000	1000	1000	0.036	0.009	0.001
Multn,MM3	1000	1000	1000	0.842	0.733	0.461

Type I errors ($n = 3000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	0	0.178	0.106	0.024
WaldDiag,MM3	1000	1000	0	0.096	0.044	0.005
WaldVCF	1000	1000	0	0.122	0.069	0.013
PearsonRS	1000	1000	0	0.098	0.050	0.009
Pearson,MM3	1000	1000	0	0.100	0.049	0.008
RSS,MM3	1000	1000	0	0.099	0.046	0.007
Multn,MM3	1000	1000	0	0.122	0.067	0.012
1F 8V						
Wald	1000	1000	5	0.540	0.427	0.237
WaldDiag,MM3	1000	1000	5	0.079	0.036	0.005
WaldVCF	1000	1000	5	0.322	0.224	0.079
PearsonRS	1000	1000	5	0.064	0.030	0.005
Pearson,MM3	1000	1000	5	0.064	0.026	0.004
RSS,MM3	1000	1000	5	0.059	0.024	0.004
Multn,MM3	1000	1000	5	0.319	0.198	0.072
1F 15V						
Wald	1000	1000	162	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	162	0.067	0.022	0.000
WaldVCF	1000	1000	162	1.000	1.000	1.000
PearsonRS	1000	1000	162	0.063	0.024	0.003
Pearson,MM3	1000	1000	162	0.061	0.022	0.002
RSS,MM3	1000	1000	162	0.056	0.016	0.001
Multn,MM3	1000	1000	162	0.914	0.829	0.601
2F 10V						
Wald	1000	1000	33	0.836	0.765	0.585
WaldDiag,MM3	1000	1000	33	0.079	0.030	0.002
WaldVCF	1000	1000	33	0.607	0.496	0.298
PearsonRS	1000	1000	33	0.089	0.045	0.006
Pearson,MM3	1000	1000	33	0.089	0.040	0.004
RSS,MM3	1000	1000	33	0.086	0.040	0.003
Multn,MM3	1000	1000	33	0.552	0.422	0.206
3F 15V						
Wald	1000	1000	298	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	298	0.045	0.019	0.001
WaldVCF	1000	1000	298	1.000	1.000	1.000
PearsonRS	1000	1000	298	0.061	0.029	0.003
Pearson,MM3	1000	1000	298	0.060	0.026	0.003
RSS,MM3	1000	1000	298	0.049	0.019	0.002
Multn,MM3	1000	1000	298	0.927	0.852	0.643

Power ($n = 500$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	5	0.875	0.829	0.746
WaldDiag,MM3	1000	1000	5	0.204	0.109	0.016
WaldVCF	1000	1000	5	0.508	0.426	0.264
PearsonRS	1000	1000	5	0.255	0.156	0.046
Pearson,MM3	1000	1000	5	0.262	0.144	0.039
RSS,MM3	1000	1000	5	0.260	0.149	0.041
Multn,MM3	1000	1000	5	0.307	0.214	0.093
1F 8V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.543	0.324	0.105
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.334	0.203	0.054
Pearson,MM3	1000	1000	1000	0.335	0.191	0.042
RSS,MM3	1000	1000	1000	0.355	0.193	0.035
Multn,MM3	1000	1000	1000	0.415	0.290	0.130
1F 15V						
Wald	1000	1000	1000			
WaldDiag,MM3	1000	1000	1000	0.736	0.461	0.077
WaldVCF	1000	1000	1000	0.257	0.226	0.184
PearsonRS	1000	1000	1000	0.378	0.178	0.018
Pearson,MM3	1000	1000	1000	0.377	0.165	0.014
RSS,MM3	1000	1000	1000	0.383	0.140	0.010
Multn,MM3	1000	1000	1000	0.084	0.034	0.007
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.195	0.065	0.008
WaldVCF	1000	1000	1000	0.979	0.967	0.955
PearsonRS	1000	1000	1000	0.247	0.128	0.017
Pearson,MM3	1000	1000	1000	0.247	0.114	0.012
RSS,MM3	1000	1000	1000	0.214	0.088	0.010
Multn,MM3	1000	1000	1000	0.226	0.133	0.040
3F 15V						
Wald	1000	1000	1000			
WaldDiag,MM3	1000	1000	1000	0.117	0.026	0.002
WaldVCF	1000	1000	1000	0.023	0.018	0.012
PearsonRS	1000	1000	1000	0.124	0.036	0.002
Pearson,MM3	1000	1000	1000	0.123	0.032	0.002
RSS,MM3	1000	1000	1000	0.092	0.020	0.001
Multn,MM3	1000	1000	1000	0.034	0.017	0.003

Power ($n = 1000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	0	0.732	0.654	0.467
WaldDiag,MM3	1000	1000	0	0.374	0.229	0.078
WaldVCF	1000	1000	0	0.559	0.436	0.232
PearsonRS	1000	1000	0	0.470	0.356	0.164
Pearson,MM3	1000	1000	0	0.472	0.353	0.146
RSS,MM3	1000	1000	0	0.478	0.354	0.151
Multn,MM3	1000	1000	0	0.502	0.377	0.187
1F 8V						
Wald	1000	1000	8	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	8	0.910	0.828	0.565
WaldVCF	1000	1000	8	0.997	0.995	0.984
PearsonRS	1000	1000	8	0.785	0.649	0.373
Pearson,MM3	1000	1000	8	0.785	0.634	0.327
RSS,MM3	1000	1000	8	0.823	0.706	0.383
Multn,MM3	1000	1000	8	0.814	0.732	0.521
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.997	0.988	0.885
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.961	0.896	0.623
Pearson,MM3	1000	1000	1000	0.961	0.890	0.572
RSS,MM3	1000	1000	1000	0.981	0.909	0.640
Multn,MM3	1000	1000	1000	0.780	0.668	0.449
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.641	0.448	0.156
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.743	0.601	0.351
Pearson,MM3	1000	1000	1000	0.743	0.583	0.304
RSS,MM3	1000	1000	1000	0.739	0.575	0.288
Multn,MM3	1000	1000	1000	0.656	0.510	0.288
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.580	0.349	0.068
WaldVCF	1000	1000	1000	0.997	0.996	0.991
PearsonRS	1000	1000	1000	0.693	0.499	0.186
Pearson,MM3	1000	1000	1000	0.686	0.487	0.148
RSS,MM3	1000	1000	1000	0.679	0.463	0.118
Multn,MM3	1000	1000	1000	0.600	0.477	0.245

Power ($n = 2000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	3	0.829	0.750	0.563
WaldDiag,MM3	1000	1000	3	0.677	0.538	0.270
WaldVCF	1000	1000	3	0.751	0.660	0.443
PearsonRS	1000	1000	3	0.767	0.666	0.442
Pearson,MM3	1000	1000	3	0.768	0.658	0.417
RSS,MM3	1000	1000	3	0.775	0.671	0.429
Multn,MM3	1000	1000	3	0.749	0.644	0.424
1F 8V						
Wald	1000	1000	4	1.000	1.000	0.999
WaldDiag,MM3	1000	1000	4	0.998	0.997	0.983
WaldVCF	1000	1000	4	1.000	0.999	0.998
PearsonRS	1000	1000	4	0.989	0.968	0.877
Pearson,MM3	1000	1000	4	0.989	0.964	0.859
RSS,MM3	1000	1000	4	0.993	0.985	0.921
Multn,MM3	1000	1000	4	1.000	0.999	0.989
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	1.000	1.000	1.000
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	1.000	1.000	0.999
Pearson,MM3	1000	1000	1000	1.000	1.000	0.998
RSS,MM3	1000	1000	1000	1.000	1.000	1.000
Multn,MM3	1000	1000	1000	1.000	0.995	0.958
2F 10V						
Wald	1000	1000	15	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	15	0.960	0.913	0.717
WaldVCF	1000	1000	15	1.000	1.000	0.995
PearsonRS	1000	1000	15	0.985	0.963	0.883
Pearson,MM3	1000	1000	15	0.985	0.960	0.858
RSS,MM3	1000	1000	15	0.987	0.966	0.865
Multn,MM3	1000	1000	15	0.984	0.966	0.864
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.978	0.929	0.721
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.993	0.967	0.881
Pearson,MM3	1000	1000	1000	0.992	0.965	0.857
RSS,MM3	1000	1000	1000	0.993	0.971	0.866
Multn,MM3	1000	1000	1000	0.987	0.960	0.836

Power ($n = 3000$)

name	n_sims	n_converged	n_rank_def	rej_rate10	rej_rate5	rej_rate1
1F 5V						
Wald	1000	1000	0	0.953	0.899	0.750
WaldDiag,MM3	1000	1000	0	0.878	0.779	0.537
WaldVCF	1000	1000	0	0.929	0.855	0.672
PearsonRS	1000	1000	0	0.942	0.900	0.730
Pearson,MM3	1000	1000	0	0.943	0.897	0.706
RSS,MM3	1000	1000	0	0.948	0.900	0.721
Multn,MM3	1000	1000	0	0.934	0.849	0.668
1F 8V						
Wald	1000	1000	1	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1	1.000	1.000	1.000
WaldVCF	1000	1000	1	1.000	1.000	1.000
PearsonRS	1000	1000	1	1.000	0.999	0.995
Pearson,MM3	1000	1000	1	1.000	0.999	0.992
RSS,MM3	1000	1000	1	1.000	1.000	0.999
Multn,MM3	1000	1000	1	1.000	1.000	1.000
1F 15V						
Wald	1000	1000	98	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	98	1.000	1.000	1.000
WaldVCF	1000	1000	98	1.000	1.000	1.000
PearsonRS	1000	1000	98	1.000	1.000	1.000
Pearson,MM3	1000	1000	98	1.000	1.000	1.000
RSS,MM3	1000	1000	98	1.000	1.000	1.000
Multn,MM3	1000	1000	98	1.000	1.000	1.000
2F 10V						
Wald	1000	1000	7	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	7	0.997	0.994	0.976
WaldVCF	1000	1000	7	1.000	1.000	0.994
PearsonRS	1000	1000	7	1.000	1.000	0.994
Pearson,MM3	1000	1000	7	1.000	1.000	0.993
RSS,MM3	1000	1000	7	1.000	1.000	0.994
Multn,MM3	1000	1000	7	1.000	0.998	0.986
3F 15V						
Wald	1000	1000	194	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	194	1.000	0.999	0.982
WaldVCF	1000	1000	194	1.000	1.000	1.000
PearsonRS	1000	1000	194	1.000	1.000	0.995
Pearson,MM3	1000	1000	194	1.000	1.000	0.995
RSS,MM3	1000	1000	194	1.000	1.000	0.996
Multn,MM3	1000	1000	194	1.000	0.996	0.977