Tables of simulation results

Contents

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Simple random sampling

Type I errors ($n = 500$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.100	0.045	0.008
WaldDiag,MM3	1000	1000	1	0.032	0.007	0.000
WaldVCF	1000	1000	1	0.098	0.045	0.008
PearsonRS	1000	1000	1	0.072	0.030	0.004
Pearson,MM3	1000	1000	1	0.073	0.029	0.004
RSS,MM3	1000	1000	1	0.076	0.032	0.004
Multn,MM3	1000	1000	1	0.082	0.032	0.006
1F 8V						
Wald	1000	1000	0	0.094	0.043	0.008
WaldDiag,MM3	1000	1000	0	0.052	0.023	0.005
WaldVCF	1000	1000	0	0.092	0.041	0.008
PearsonRS	1000	1000	0	0.086	0.043	0.005
Pearson,MM3	1000	1000	0	0.086	0.038	0.004
RSS,MM3	1000	1000	0	0.085	0.035	0.004
Multn,MM3	1000	1000	0	0.085	0.040	0.007
1F 15V						
Wald	1000	1000	15	0.102	0.064	0.020
WaldDiag,MM3	1000	1000	15	0.065	0.033	0.008
WaldVCF	1000	1000	15	0.101	0.061	0.019
PearsonRS	1000	1000	15	0.094	0.047	0.011
Pearson,MM3	1000	1000	15	0.093	0.043	0.010
RSS,MM3	1000	1000	15	0.098	0.051	0.013
Multn,MM3	1000	1000	15	0.101	0.061	0.019
2F 10V						
Wald	1000	1000	8	0.112	0.053	0.010
WaldDiag,MM3	1000	1000	8	0.026	0.005	0.000
WaldVCF	1000	1000	8	0.105	0.051	0.008
PearsonRS	1000	1000	8	0.081	0.045	0.009
Pearson,MM3	1000	1000	8	0.081	0.044	0.009
RSS,MM3	1000	1000	8	0.090	0.044	0.006
Multn,MM3	1000	1000	8	0.091	0.047	0.005
3F 15V						
Wald	1000	1000	25	0.113	0.063	0.005
WaldDiag,MM3	1000	1000	25	0.025	0.008	0.000
WaldVCF	1000	1000	25	0.106	0.058	0.004
PearsonRS	1000	1000	25	0.093	0.053	0.009
Pearson,MM3	1000	1000	25	0.091	0.050	0.008
RSS,MM3	1000	1000	25	0.089	0.049	0.006
Multn,MM3	1000	1000	25	0.092	0.044	0.003

Type I errors ($n = 1000$)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	10%	5%	1%
1F 5V						
Wald	1000	1000	0	0.116	0.064	0.008
WaldDiag,MM3	1000	1000	0	0.065	0.031	0.003
WaldVCF	1000	1000	0	0.114	0.061	0.008
PearsonRS	1000	1000	0	0.087	0.050	0.014
Pearson,MM3	1000	1000	0	0.087	0.046	0.012
RSS,MM3	1000	1000	0	0.095	0.050	0.010
Multn,MM3	1000	1000	0	0.109	0.059	0.008
1F 8V						
Wald	1000	1000	1	0.112	0.067	0.008
WaldDiag,MM3	1000	1000	1	0.083	0.040	0.008
WaldVCF	1000	1000	1	0.111	0.066	0.008
PearsonRS	1000	1000	1	0.096	0.043	0.008
Pearson,MM3	1000	1000	1	0.094	0.039	0.004
RSS,MM3	1000	1000	1	0.097	0.050	0.006
Multn,MM3	1000	1000	1	0.109	0.064	0.008
1F 15V						
Wald	1000	1000	6	0.098	0.058	0.017
WaldDiag,MM3	1000	1000	6	0.066	0.042	0.010
WaldVCF	1000	1000	6	0.097	0.058	0.016
PearsonRS	1000	1000	6	0.095	0.048	0.014
Pearson,MM3	1000	1000	6	0.094	0.045	0.013
RSS,MM3	1000	1000	6	0.093	0.052	0.012
Multn,MM3	1000	1000	6	0.096	0.056	0.016
2F 10V						
Wald	1000	1000	5	0.101	0.051	0.012
WaldDiag,MM3	1000	1000	5	0.052	0.023	0.002
WaldVCF	1000	1000	5	0.097	0.050	0.011
PearsonRS	1000	1000	5	0.105	0.061	0.016
Pearson,MM3	1000	1000	5	0.104	0.056	0.014
RSS,MM3	1000	1000	5	0.103	0.055	0.011
Multn,MM3	1000	1000	5	0.096	0.044	0.010
3F 15V						
Wald	1000	1000	34	0.115	0.061	0.013
WaldDiag,MM3	1000	1000	34	0.057	0.025	0.006
WaldVCF	1000	1000	34	0.109	0.056	0.013
PearsonRS	1000	1000	34	0.111	0.067	0.017
Pearson,MM3	1000	1000	34	0.108	0.064	0.012
RSS,MM3	1000	1000	34	0.106	0.053	0.010
Multn,MM3	1000	1000	34	0.101	0.052	0.013

Type I errors ($n = 2000$)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.097	0.046	0.015
WaldDiag,MM3	1000	1000	1	0.067	0.029	0.010
WaldVCF	1000	1000	1	0.096	0.046	0.015
PearsonRS	1000	1000	1	0.088	0.049	0.015
Pearson,MM3	1000	1000	1	0.090	0.048	0.014
RSS,MM3	1000	1000	1	0.091	0.044	0.017
Multn,MM3	1000	1000	1	0.091	0.045	0.015
1F 8V						
Wald	1000	1000	5	0.099	0.046	0.007
WaldDiag,MM3	1000	1000	5	0.079	0.033	0.008
WaldVCF	1000	1000	5	0.099	0.046	0.007
PearsonRS	1000	1000	5	0.097	0.059	0.012
Pearson,MM3	1000	1000	5	0.097	0.053	0.009
RSS,MM3	1000	1000	5	0.109	0.046	0.008
Multn,MM3	1000	1000	5	0.099	0.045	0.007
1F 15V						
Wald	1000	1000	19	0.090	0.045	0.006
WaldDiag,MM3	1000	1000	19	0.067	0.032	0.008
WaldVCF	1000	1000	19	0.089	0.045	0.006
PearsonRS	1000	1000	19	0.104	0.057	0.015
Pearson,MM3	1000	1000	19	0.103	0.052	0.013
RSS,MM3	1000	1000	19	0.106	0.052	0.009
Multn,MM3	1000	1000	19	0.088	0.045	0.006
2F 10V						
Wald	1000	1000	16	0.108	0.061	0.009
WaldDiag,MM3	1000	1000	16	0.080	0.042	0.006
WaldVCF	1000	1000	16	0.107	0.059	0.008
PearsonRS	1000	1000	16	0.087	0.050	0.011
Pearson,MM3	1000	1000	16	0.086	0.046	0.009
RSS,MM3	1000	1000	16	0.086	0.045	0.009
Multn,MM3	1000	1000	16	0.104	0.057	0.008
3F 15V						
Wald	1000	1000	49	0.110	0.063	0.019
WaldDiag,MM3	1000	1000	49	0.072	0.043	0.007
WaldVCF	1000	1000	49	0.096	0.058	0.016
PearsonRS	1000	1000	49	0.110	0.050	0.012
Pearson,MM3	1000	1000	49	0.108	0.048	0.011
RSS,MM3	1000	1000	49	0.106	0.053	0.014
Multn,MM3	1000	1000	49	0.094	0.057	0.016

Type I errors ($n = 3000$)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.092	0.051	0.005
WaldDiag,MM3	1000	1000	1	0.072	0.036	0.002
WaldVCF	1000	1000	1	0.090	0.050	0.005
PearsonRS	1000	1000	1	0.084	0.045	0.008
Pearson,MM3	1000	1000	1	0.085	0.044	0.007
RSS,MM3	1000	1000	1	0.091	0.045	0.006
Multn,MM3	1000	1000	1	0.088	0.050	0.005
1F 8V						
Wald	1000	1000	2	0.104	0.049	0.005
WaldDiag,MM3	1000	1000	2	0.090	0.043	0.006
WaldVCF	1000	1000	2	0.104	0.048	0.005
PearsonRS	1000	1000	2	0.095	0.050	0.013
Pearson,MM3	1000	1000	2	0.094	0.044	0.010
RSS,MM3	1000	1000	2	0.097	0.048	0.009
Multn,MM3	1000	1000	2	0.103	0.047	0.005
1F 15V						
Wald	1000	1000	26	0.109	0.059	0.006
WaldDiag,MM3	1000	1000	26	0.097	0.049	0.010
WaldVCF	1000	1000	26	0.107	0.056	0.006
PearsonRS	1000	1000	26	0.108	0.050	0.015
Pearson,MM3	1000	1000	26	0.107	0.049	0.011
RSS,MM3	1000	1000	26	0.111	0.044	0.012
Multn,MM3	1000	1000	26	0.106	0.058	0.006
2F 10V						
Wald	1000	1000	15	0.106	0.057	0.010
WaldDiag,MM3	1000	1000	15	0.072	0.043	0.005
WaldVCF	1000	1000	15	0.104	0.051	0.009
PearsonRS	1000	1000	15	0.092	0.037	0.012
Pearson,MM3	1000	1000	15	0.088	0.035	0.011
RSS,MM3	1000	1000	15	0.095	0.034	0.009
Multn,MM3	1000	1000	15	0.104	0.051	0.009
3F 15V						
Wald	1000	1000	47	0.117	0.059	0.010
WaldDiag,MM3	1000	1000	47	0.086	0.038	0.007
WaldVCF	1000	1000	47	0.104	0.056	0.010
PearsonRS	1000	1000	47	0.100	0.054	0.015
Pearson,MM3	1000	1000	47	0.098	0.053	0.012
RSS,MM3	1000	1000	47	0.101	0.054	0.012
Multn,MM3	1000	1000	47	0.102	0.054	0.010

Power ($n = 500$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	0	0.328	0.227	0.089
WaldDiag,MM3	1000	1000	0	0.135	0.058	0.011
WaldVCF	1000	1000	0	0.327	0.225	0.089
PearsonRS	1000	1000	0	0.331	0.223	0.100
Pearson,MM3	1000	1000	0	0.333	0.217	0.089
RSS,MM3	1000	1000	0	0.349	0.233	0.097
Multn,MM3	1000	1000	0	0.312	0.197	0.074
1F 8V						
Wald	1000	1000	3	0.818	0.740	0.565
WaldDiag,MM3	1000	1000	3	0.705	0.561	0.302
WaldVCF	1000	1000	3	0.815	0.739	0.561
PearsonRS	1000	1000	3	0.683	0.576	0.342
Pearson,MM3	1000	1000	3	0.681	0.564	0.316
RSS,MM3	1000	1000	3	0.723	0.620	0.397
Multn,MM3	1000	1000	3	0.808	0.732	0.550
1F 15V						
Wald	1000	1000	6	0.966	0.938	0.861
WaldDiag,MM3	1000	1000	6	0.932	0.883	0.756
WaldVCF	1000	1000	6	0.966	0.936	0.859
PearsonRS	1000	1000	6	0.912	0.866	0.740
Pearson,MM3	1000	1000	6	0.911	0.862	0.727
RSS,MM3	1000	1000	6	0.935	0.894	0.790
Multn,MM3	1000	1000	6	0.966	0.935	0.857
2F 10V						
Wald	1000	1000	11	0.189	0.123	0.030
WaldDiag,MM3	1000	1000	11	0.108	0.044	0.009
WaldVCF	1000	1000	11	0.178	0.117	0.027
PearsonRS	1000	1000	11	0.219	0.143	0.053
Pearson,MM3	1000	1000	11	0.217	0.136	0.045
RSS,MM3	1000	1000	11	0.210	0.135	0.047
Multn,MM3	1000	1000	11	0.166	0.099	0.022
3F 15V						
Wald	1000	1000	26	0.222	0.152	0.056
WaldDiag,MM3	1000	1000	26	0.136	0.081	0.021
WaldVCF	1000	1000	26	0.213	0.146	0.053
PearsonRS	1000	1000	26	0.269	0.172	0.071
Pearson,MM3	1000	1000	26	0.266	0.168	0.058
RSS,MM3	1000	1000	26	0.274	0.180	0.073
Multn,MM3	1000	1000	26	0.192	0.134	0.044

Power ($n = 1000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	0	0.527	0.422	0.228
WaldDiag,MM3	1000	1000	0	0.376	0.240	0.077
WaldVCF	1000	1000	0	0.527	0.419	0.226
PearsonRS	1000	1000	0	0.545	0.452	0.264
Pearson,MM3	1000	1000	0	0.545	0.446	0.258
RSS,MM3	1000	1000	0	0.561	0.462	0.268
Multn,MM3	1000	1000	0	0.522	0.418	0.216
1F 8V						
Wald	1000	1000	4	0.979	0.969	0.907
WaldDiag,MM3	1000	1000	4	0.956	0.925	0.813
WaldVCF	1000	1000	4	0.979	0.969	0.906
PearsonRS	1000	1000	4	0.927	0.886	0.743
Pearson,MM3	1000	1000	4	0.927	0.883	0.726
RSS,MM3	1000	1000	4	0.945	0.919	0.794
Multn,MM3	1000	1000	4	0.979	0.967	0.905
1F 15V						
Wald	1000	1000	8	1.000	1.000	0.997
WaldDiag,MM3	1000	1000	8	1.000	0.999	0.993
WaldVCF	1000	1000	8	1.000	1.000	0.997
PearsonRS	1000	1000	8	0.998	0.996	0.985
Pearson,MM3	1000	1000	8	0.997	0.996	0.985
RSS,MM3	1000	1000	8	0.999	0.997	0.993
Multn,MM3	1000	1000	8	1.000	1.000	0.997
2F 10V						
Wald	1000	1000	13	0.314	0.210	0.090
WaldDiag,MM3	1000	1000	13	0.272	0.166	0.059
WaldVCF	1000	1000	13	0.297	0.199	0.082
PearsonRS	1000	1000	13	0.391	0.295	0.154
Pearson,MM3	1000	1000	13	0.388	0.284	0.141
RSS,MM3	1000	1000	13	0.406	0.307	0.147
Multn,MM3	1000	1000	13	0.295	0.195	0.079
3F 15V						
Wald	1000	1000	25	0.399	0.298	0.143
WaldDiag,MM3	1000	1000	25	0.379	0.265	0.127
WaldVCF	1000	1000	25	0.381	0.285	0.126
PearsonRS	1000	1000	25	0.498	0.396	0.226
Pearson,MM3	1000	1000	25	0.498	0.383	0.216
RSS,MM3	1000	1000	25	0.516	0.414	0.245
Multn,MM3	1000	1000	25	0.379	0.279	0.122

Power ($n = 2000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	0	0.796	0.708	0.513
WaldDiag,MM3	1000	1000	0	0.672	0.543	0.284
WaldVCF	1000	1000	0	0.796	0.708	0.510
PearsonRS	1000	1000	0	0.811	0.749	0.552
Pearson,MM3	1000	1000	0	0.811	0.744	0.537
RSS,MM3	1000	1000	0	0.827	0.752	0.568
Multn,MM3	1000	1000	0	0.792	0.705	0.505
1F 8V						
Wald	1000	1000	4	1.000	1.000	0.999
WaldDiag,MM3	1000	1000	4	1.000	1.000	0.995
WaldVCF	1000	1000	4	1.000	1.000	0.999
PearsonRS	1000	1000	4	0.998	0.993	0.978
Pearson,MM3	1000	1000	4	0.998	0.993	0.974
RSS,MM3	1000	1000	4	1.000	0.999	0.992
Multn,MM3	1000	1000	4	1.000	1.000	0.999
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	10	0.534	0.424	0.260
WaldDiag,MM3	1000	1000	10	0.527	0.418	0.250
WaldVCF	1000	1000	10	0.520	0.406	0.240
PearsonRS	1000	1000	10	0.611	0.513	0.372
Pearson,MM3	1000	1000	10	0.609	0.505	0.340
RSS,MM3	1000	1000	10	0.629	0.534	0.379
Multn,MM3	1000	1000	10	0.522	0.411	0.244
3F 15V						
Wald	1000	1000	42	0.662	0.575	0.384
WaldDiag,MM3	1000	1000	42	0.698	0.592	0.400
WaldVCF	1000	1000	42	0.650	0.552	0.363
PearsonRS	1000	1000	42	0.769	0.689	0.531
Pearson,MM3	1000	1000	42	0.768	0.686	0.515
RSS,MM3	1000	1000	42	0.802	0.716	0.560
Multn,MM3	1000	1000	42	0.648	0.551	0.365

Power ($n = 3000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	0	0.924	0.879	0.740
WaldDiag,MM3	1000	1000	0	0.854	0.782	0.546
WaldVCF	1000	1000	0	0.923	0.879	0.739
PearsonRS	1000	1000	0	0.933	0.891	0.770
Pearson,MM3	1000	1000	0	0.933	0.889	0.756
RSS,MM3	1000	1000	0	0.937	0.901	0.784
Multn,MM3	1000	1000	0	0.922	0.877	0.739
1F 8V						
Wald	1000	1000	3	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	3	1.000	1.000	1.000
WaldVCF	1000	1000	3	1.000	1.000	1.000
PearsonRS	1000	1000	3	1.000	1.000	0.998
Pearson,MM3	1000	1000	3	1.000	1.000	0.997
RSS,MM3	1000	1000	3	1.000	1.000	0.999
Multn,MM3	1000	1000	3	1.000	1.000	1.000
1F 15V						
Wald	1000	1000	15	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	15	1.000	1.000	1.000
WaldVCF	1000	1000	15	1.000	1.000	1.000
PearsonRS	1000	1000	15	1.000	1.000	1.000
Pearson,MM3	1000	1000	15	1.000	1.000	1.000
RSS,MM3	1000	1000	15	1.000	1.000	1.000
Multn,MM3	1000	1000	15	1.000	1.000	1.000
2F 10V						
Wald	1000	1000	12	0.651	0.557	0.393
WaldDiag,MM3	1000	1000	12	0.680	0.567	0.397
WaldVCF	1000	1000	12	0.636	0.541	0.373
PearsonRS	1000	1000	12	0.710	0.646	0.497
Pearson,MM3	1000	1000	12	0.709	0.635	0.473
RSS,MM3	1000	1000	12	0.745	0.672	0.525
Multn,MM3	1000	1000	12	0.639	0.546	0.380
3F 15V						
Wald	1000	1000	39	0.812	0.731	0.578
WaldDiag,MM3	1000	1000	39	0.844	0.784	0.622
WaldVCF	1000	1000	39	0.801	0.718	0.557
PearsonRS	1000	1000	39	0.871	0.817	0.700
Pearson,MM3	1000	1000	39	0.869	0.811	0.682
RSS,MM3	1000	1000	39	0.892	0.836	0.731
Multn,MM3	1000	1000	39	0.804	0.716	0.560

Stratified sampling

Type I errors ($n = 500$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.129	0.073	0.013
WaldDiag,MM3	1000	1000	1	0.062	0.028	0.004
WaldVCF	1000	1000	1	0.118	0.059	0.007
PearsonRS	1000	1000	1	0.102	0.059	0.011
Pearson,MM3	1000	1000	1	0.104	0.058	0.009
RSS,MM3	1000	1000	1	0.105	0.054	0.007
Multn,MM3	1000	1000	1	0.121	0.063	0.008
1F 8V						
Wald	1000	1000	2	0.199	0.135	0.045
WaldDiag,MM3	1000	1000	2	0.073	0.036	0.005
WaldVCF	1000	1000	2	0.141	0.084	0.023
PearsonRS	1000	1000	2	0.113	0.062	0.014
Pearson,MM3	1000	1000	2	0.113	0.059	0.010
RSS,MM3	1000	1000	2	0.096	0.059	0.007
Multn,MM3	1000	1000	2	0.182	0.115	0.040
1F 15V						
Wald	1000	1000	10	0.728	0.625	0.397
WaldDiag,MM3	1000	1000	10	0.077	0.030	0.005
WaldVCF	1000	1000	10	0.492	0.363	0.174
PearsonRS	1000	1000	10	0.083	0.043	0.010
Pearson,MM3	1000	1000	10	0.083	0.042	0.008
RSS,MM3	1000	1000	10	0.087	0.045	0.009
Multn,MM3	1000	1000	10	0.730	0.626	0.411
2F 10V						
Wald	1000	1000	12	0.249	0.168	0.053
WaldDiag,MM3	1000	1000	12	0.050	0.020	0.005
WaldVCF	1000	1000	12	0.180	0.102	0.025
PearsonRS	1000	1000	12	0.082	0.048	0.009
Pearson,MM3	1000	1000	12	0.082	0.045	0.008
RSS,MM3	1000	1000	12	0.080	0.038	0.009
Multn,MM3	1000	1000	12	0.256	0.169	0.061
3F 15V						
Wald	1000	1000	39	0.593	0.475	0.266
WaldDiag,MM3	1000	1000	39	0.046	0.016	0.003
WaldVCF	1000	1000	39	0.410	0.286	0.127
PearsonRS	1000	1000	39	0.069	0.034	0.005
Pearson,MM3	1000	1000	39	0.068	0.027	0.003
RSS,MM3	1000	1000	39	0.071	0.026	0.002
Multn,MM3	1000	1000	39	0.639	0.521	0.317

Type I errors ($n = 1000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.110	0.061	0.013
WaldDiag,MM3	1000	1000	1	0.066	0.026	0.002
WaldVCF	1000	1000	1	0.095	0.051	0.006
PearsonRS	1000	1000	1	0.083	0.039	0.009
Pearson,MM3	1000	1000	1	0.085	0.039	0.008
RSS,MM3	1000	1000	1	0.084	0.040	0.007
Multn,MM3	1000	1000	1	0.094	0.052	0.007
1F 8V						
Wald	1000	1000	2	0.226	0.131	0.038
WaldDiag,MM3	1000	1000	2	0.071	0.032	0.004
WaldVCF	1000	1000	2	0.146	0.074	0.016
PearsonRS	1000	1000	2	0.092	0.049	0.010
Pearson,MM3	1000	1000	2	0.091	0.049	0.008
RSS,MM3	1000	1000	2	0.088	0.046	0.006
Multn,MM3	1000	1000	2	0.206	0.111	0.032
1F 15V						
Wald	1000	1000	17	0.723	0.616	0.425
WaldDiag,MM3	1000	1000	17	0.077	0.039	0.006
WaldVCF	1000	1000	17	0.499	0.386	0.194
PearsonRS	1000	1000	17	0.077	0.034	0.006
Pearson,MM3	1000	1000	17	0.076	0.031	0.006
RSS,MM3	1000	1000	17	0.081	0.026	0.005
Multn,MM3	1000	1000	17	0.728	0.629	0.445
2F 10V						
Wald	1000	1000	9	0.220	0.141	0.054
WaldDiag,MM3	1000	1000	9	0.057	0.027	0.004
WaldVCF	1000	1000	9	0.155	0.089	0.027
PearsonRS	1000	1000	9	0.080	0.046	0.008
Pearson,MM3	1000	1000	9	0.079	0.040	0.006
RSS,MM3	1000	1000	9	0.083	0.047	0.004
Multn,MM3	1000	1000	9	0.227	0.137	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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	2	0.506	0.378	0.178
WaldDiag,MM3	1000	1000	2	0.311	0.183	0.045
WaldVCF	1000	1000	2	0.468	0.340	0.146
PearsonRS	1000	1000	2	0.527	0.418	0.208
Pearson,MM3	1000	1000	2	0.528	0.415	0.196
RSS,MM3	1000	1000	2	0.538	0.420	0.201
Multn,MM3	1000	1000	2	0.467	0.344	0.150
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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 ($n = 500$)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
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