Tables of simulation results

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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 ($n = 500$)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	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 ($n = 1000$)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	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 ($n = 2000$)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	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 ($n = 3000$)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	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	0.161	0.091	0.030
WaldDiag,MM3	1000	1000	1	0.050	0.019	0.001
WaldVCF	1000	1000	1	0.117	0.066	0.010
PearsonRS	1000	1000	1	0.087	0.040	0.009
Pearson,MM3	1000	1000	1	0.088	0.038	0.008
RSS,MM3	1000	1000	1	0.088	0.033	0.003
Multn,MM3	1000	1000	1	0.129	0.067	0.012
1F 8V						
Wald	1000	1000	5	0.349	0.259	0.129
WaldDiag,MM3	1000	1000	5	0.061	0.030	0.004
WaldVCF	1000	1000	5	0.176	0.113	0.037
PearsonRS	1000	1000	5	0.104	0.049	0.012
Pearson,MM3	1000	1000	5	0.104	0.045	0.009
RSS,MM3	1000	1000	5	0.103	0.046	0.008
Multn,MM3	1000	1000	5	0.283	0.194	0.087
1F 15V						
Wald	1000	1000	15	0.988	0.980	0.940
WaldDiag,MM3	1000	1000	15	0.050	0.014	0.003
WaldVCF	1000	1000	15	0.864	0.803	0.617
PearsonRS	1000	1000	15	0.088	0.045	0.005
Pearson,MM3	1000	1000	15	0.087	0.044	0.004
RSS,MM3	1000	1000	15	0.075	0.037	0.002
Multn,MM3	1000	1000	15	0.980	0.957	0.879
2F 10V						
Wald	1000	1000	19	0.468	0.372	0.198
WaldDiag,MM3	1000	1000	19	0.033	0.012	0.002
WaldVCF	1000	1000	19	0.287	0.180	0.059
PearsonRS	1000	1000	19	0.096	0.050	0.007
Pearson,MM3	1000	1000	19	0.096	0.045	0.005
RSS,MM3	1000	1000	19	0.091	0.036	0.002
Multn,MM3	1000	1000	19	0.441	0.344	0.178
3F 15V						
Wald	1000	1000	65	0.939	0.904	0.797
WaldDiag,MM3	1000	1000	65	0.027	0.008	0.000
WaldVCF	1000	1000	65	0.755	0.670	0.466
PearsonRS	1000	1000	65	0.066	0.025	0.003
Pearson,MM3	1000	1000	65	0.063	0.019	0.002
RSS,MM3	1000	1000	65	0.043	0.015	0.002
Multn,MM3	1000	1000	65	0.932	0.876	0.742

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	18	0.723	0.616	0.425
WaldDiag,MM3	1000	1000	18	0.077	0.039	0.006
WaldVCF	1000	1000	18	0.499	0.386	0.194
PearsonRS	1000	1000	18	0.077	0.034	0.006
Pearson,MM3	1000	1000	18	0.076	0.031	0.006
RSS,MM3	1000	1000	18	0.081	0.026	0.005
Multn,MM3	1000	1000	18	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	41	0.607	0.492	0.278
WaldDiag,MM3	1000	1000	41	0.057	0.024	0.002
WaldVCF	1000	1000	41	0.433	0.310	0.140
PearsonRS	1000	1000	41	0.068	0.048	0.009
Pearson,MM3	1000	1000	41	0.068	0.046	0.008
RSS,MM3	1000	1000	41	0.068	0.036	0.009
Multn,MM3	1000	1000	41	0.642	0.553	0.342

Type I errors ($n = 2000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.115	0.060	0.011
WaldDiag,MM3	1000	1000	1	0.082	0.036	0.007
WaldVCF	1000	1000	1	0.103	0.054	0.010
PearsonRS	1000	1000	1	0.094	0.054	0.011
Pearson,MM3	1000	1000	1	0.095	0.052	0.010
RSS,MM3	1000	1000	1	0.096	0.048	0.010
Multn,MM3	1000	1000	1	0.107	0.056	0.011
1F 8V						
Wald	1000	1000	1	0.147	0.084	0.028
WaldDiag,MM3	1000	1000	1	0.095	0.046	0.008
WaldVCF	1000	1000	1	0.119	0.063	0.020
PearsonRS	1000	1000	1	0.122	0.065	0.021
Pearson,MM3	1000	1000	1	0.121	0.060	0.018
RSS,MM3	1000	1000	1	0.109	0.061	0.021
Multn,MM3	1000	1000	1	0.141	0.074	0.027
1F 15V						
Wald	1000	1000	24	0.337	0.236	0.073
WaldDiag,MM3	1000	1000	24	0.051	0.025	0.003
WaldVCF	1000	1000	24	0.245	0.145	0.034
PearsonRS	1000	1000	24	0.089	0.046	0.009
Pearson,MM3	1000	1000	24	0.089	0.044	0.006
RSS,MM3	1000	1000	24	0.082	0.036	0.008
Multn,MM3	1000	1000	24	0.358	0.262	0.098
2F 10V						
Wald	1000	1000	11	0.178	0.105	0.041
WaldDiag,MM3	1000	1000	11	0.084	0.043	0.008
WaldVCF	1000	1000	11	0.142	0.085	0.030
PearsonRS	1000	1000	11	0.100	0.056	0.014
Pearson,MM3	1000	1000	11	0.098	0.054	0.014
RSS,MM3	1000	1000	11	0.103	0.058	0.010
Multn,MM3	1000	1000	11	0.180	0.110	0.042
3F 15V						
Wald	1000	1000	45	0.345	0.223	0.074
WaldDiag,MM3	1000	1000	45	0.082	0.037	0.004
WaldVCF	1000	1000	45	0.255	0.149	0.037
PearsonRS	1000	1000	45	0.084	0.050	0.015
Pearson,MM3	1000	1000	45	0.084	0.048	0.014
RSS,MM3	1000	1000	45	0.084	0.045	0.011
Multn,MM3	1000	1000	45	0.370	0.265	0.095

Type I errors ($n = 3000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.124	0.063	0.014
WaldDiag,MM3	1000	1000	1	0.091	0.048	0.013
WaldVCF	1000	1000	1	0.112	0.060	0.013
PearsonRS	1000	1000	1	0.100	0.060	0.008
Pearson,MM3	1000	1000	1	0.101	0.059	0.006
RSS,MM3	1000	1000	1	0.100	0.052	0.006
Multn,MM3	1000	1000	1	0.116	0.060	0.014
1F 8V						
Wald	1000	1000	4	0.129	0.079	0.021
WaldDiag,MM3	1000	1000	4	0.090	0.041	0.007
WaldVCF	1000	1000	4	0.113	0.066	0.016
PearsonRS	1000	1000	4	0.098	0.056	0.017
Pearson,MM3	1000	1000	4	0.098	0.054	0.013
RSS,MM3	1000	1000	4	0.095	0.057	0.015
Multn,MM3	1000	1000	4	0.122	0.078	0.021
1F 15V						
Wald	1000	1000	23	0.247	0.152	0.055
WaldDiag,MM3	1000	1000	23	0.084	0.040	0.008
WaldVCF	1000	1000	23	0.178	0.105	0.033
PearsonRS	1000	1000	23	0.078	0.039	0.007
Pearson,MM3	1000	1000	23	0.077	0.038	0.006
RSS,MM3	1000	1000	23	0.083	0.033	0.007
Multn,MM3	1000	1000	23	0.271	0.167	0.066
2F 10V						
Wald	1000	1000	15	0.140	0.075	0.027
WaldDiag,MM3	1000	1000	15	0.081	0.037	0.007
WaldVCF	1000	1000	15	0.116	0.064	0.018
PearsonRS	1000	1000	15	0.093	0.047	0.012
Pearson,MM3	1000	1000	15	0.092	0.043	0.011
RSS,MM3	1000	1000	15	0.095	0.042	0.013
Multn,MM3	1000	1000	15	0.143	0.079	0.027
3F 15V						
Wald	1000	1000	55	0.252	0.144	0.040
WaldDiag,MM3	1000	1000	55	0.078	0.040	0.006
WaldVCF	1000	1000	55	0.197	0.106	0.029
PearsonRS	1000	1000	55	0.101	0.052	0.016
Pearson,MM3	1000	1000	55	0.100	0.050	0.014
RSS,MM3	1000	1000	55	0.099	0.048	0.009
Multn,MM3	1000	1000	55	0.274	0.171	0.048

Power ($n = 500$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	4	0.362	0.242	0.099
WaldDiag,MM3	1000	1000	4	0.124	0.052	0.005
WaldVCF	1000	1000	4	0.307	0.184	0.061
PearsonRS	1000	1000	4	0.308	0.213	0.065
Pearson,MM3	1000	1000	4	0.310	0.206	0.055
RSS,MM3	1000	1000	4	0.317	0.206	0.058
Multn,MM3	1000	1000	4	0.291	0.152	0.048
1F 8V						
Wald	1000	1000	6	0.882	0.825	0.676
WaldDiag,MM3	1000	1000	6	0.627	0.471	0.209
WaldVCF	1000	1000	6	0.735	0.612	0.346
PearsonRS	1000	1000	6	0.599	0.466	0.262
Pearson,MM3	1000	1000	6	0.599	0.450	0.241
RSS,MM3	1000	1000	6	0.646	0.503	0.272
Multn,MM3	1000	1000	6	0.832	0.741	0.550
1F 15V						
Wald	1000	1000	43	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	43	0.850	0.743	0.466
WaldVCF	1000	1000	43	0.995	0.988	0.944
PearsonRS	1000	1000	43	0.793	0.682	0.441
Pearson,MM3	1000	1000	43	0.793	0.670	0.406
RSS,MM3	1000	1000	43	0.841	0.730	0.487
Multn,MM3	1000	1000	43	1.000	0.999	0.993
2F 10V						
Wald	1000	1000	29	0.589	0.488	0.294
WaldDiag,MM3	1000	1000	29	0.081	0.032	0.005
WaldVCF	1000	1000	29	0.341	0.236	0.094
PearsonRS	1000	1000	29	0.190	0.115	0.036
Pearson,MM3	1000	1000	29	0.190	0.104	0.027
RSS,MM3	1000	1000	29	0.181	0.101	0.024
Multn,MM3	1000	1000	29	0.508	0.391	0.210
3F 15V						
Wald	1000	1000	46	0.979	0.962	0.902
WaldDiag,MM3	1000	1000	46	0.075	0.020	0.002
WaldVCF	1000	1000	46	0.874	0.793	0.570
PearsonRS	1000	1000	46	0.216	0.132	0.037
Pearson,MM3	1000	1000	46	0.215	0.127	0.033
RSS,MM3	1000	1000	46	0.186	0.106	0.015
Multn,MM3	1000	1000	46	0.963	0.944	0.833

Power ($n = 1000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	0	0.480	0.380	0.188
WaldDiag,MM3	1000	1000	0	0.295	0.177	0.043
WaldVCF	1000	1000	0	0.455	0.347	0.158
PearsonRS	1000	1000	0	0.516	0.387	0.213
Pearson,MM3	1000	1000	0	0.516	0.380	0.193
RSS,MM3	1000	1000	0	0.527	0.403	0.205
Multn,MM3	1000	1000	0	0.452	0.345	0.156
1F 8V						
Wald	1000	1000	4	0.980	0.954	0.868
WaldDiag,MM3	1000	1000	4	0.951	0.882	0.696
WaldVCF	1000	1000	4	0.950	0.912	0.749
PearsonRS	1000	1000	4	0.886	0.804	0.621
Pearson,MM3	1000	1000	4	0.886	0.796	0.601
RSS,MM3	1000	1000	4	0.920	0.861	0.675
Multn,MM3	1000	1000	4	0.969	0.940	0.840
1F 15V						
Wald	1000	1000	11	1.000	1.000	0.998
WaldDiag,MM3	1000	1000	11	0.998	0.995	0.976
WaldVCF	1000	1000	11	0.998	0.993	0.964
PearsonRS	1000	1000	11	0.993	0.985	0.925
Pearson,MM3	1000	1000	11	0.993	0.984	0.919
RSS,MM3	1000	1000	11	0.996	0.991	0.953
Multn,MM3	1000	1000	11	1.000	1.000	0.999
2F 10V						
Wald	1000	1000	10	0.432	0.313	0.145
WaldDiag,MM3	1000	1000	10	0.186	0.100	0.023
WaldVCF	1000	1000	10	0.293	0.196	0.068
PearsonRS	1000	1000	10	0.320	0.214	0.081
Pearson,MM3	1000	1000	10	0.319	0.200	0.071
RSS,MM3	1000	1000	10	0.303	0.202	0.067
Multn,MM3	1000	1000	10	0.401	0.292	0.130
3F 15V						
Wald	1000	1000	37	0.813	0.726	0.504
WaldDiag,MM3	1000	1000	37	0.223	0.134	0.030
WaldVCF	1000	1000	37	0.645	0.519	0.300
PearsonRS	1000	1000	37	0.429	0.314	0.151
Pearson,MM3	1000	1000	37	0.425	0.305	0.135
RSS,MM3	1000	1000	37	0.429	0.294	0.123
Multn,MM3	1000	1000	37	0.834	0.749	0.545

Power ($n = 2000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.771	0.669	0.444
WaldDiag,MM3	1000	1000	1	0.605	0.472	0.212
WaldVCF	1000	1000	1	0.758	0.656	0.425
PearsonRS	1000	1000	1	0.811	0.731	0.550
Pearson,MM3	1000	1000	1	0.811	0.730	0.535
RSS,MM3	1000	1000	1	0.820	0.739	0.558
Multn,MM3	1000	1000	1	0.757	0.655	0.425
1F 8V						
Wald	1000	1000	1	1.000	0.999	0.999
WaldDiag,MM3	1000	1000	1	0.999	0.999	0.997
WaldVCF	1000	1000	1	1.000	0.999	0.997
PearsonRS	1000	1000	1	0.996	0.994	0.982
Pearson,MM3	1000	1000	1	0.996	0.994	0.979
RSS,MM3	1000	1000	1	0.999	0.997	0.990
Multn,MM3	1000	1000	1	1.000	0.999	0.999
1F 15V						
Wald	1000	1000	21	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	21	1.000	1.000	1.000
WaldVCF	1000	1000	21	1.000	1.000	1.000
PearsonRS	1000	1000	21	1.000	1.000	1.000
Pearson,MM3	1000	1000	21	1.000	1.000	1.000
RSS,MM3	1000	1000	21	1.000	1.000	1.000
Multn,MM3	1000	1000	21	1.000	1.000	1.000
2F 10V						
Wald	1000	1000	7	0.505	0.374	0.176
WaldDiag,MM3	1000	1000	7	0.430	0.279	0.115
WaldVCF	1000	1000	7	0.432	0.291	0.111
PearsonRS	1000	1000	7	0.568	0.450	0.247
Pearson,MM3	1000	1000	7	0.565	0.437	0.228
RSS,MM3	1000	1000	7	0.570	0.439	0.221
Multn,MM3	1000	1000	7	0.493	0.367	0.169
3F 15V						
Wald	1000	1000	35	0.772	0.655	0.417
WaldDiag,MM3	1000	1000	35	0.592	0.455	0.209
WaldVCF	1000	1000	35	0.672	0.546	0.324
PearsonRS	1000	1000	35	0.808	0.705	0.497
Pearson,MM3	1000	1000	35	0.806	0.697	0.465
RSS,MM3	1000	1000	35	0.793	0.686	0.472
Multn,MM3	1000	1000	35	0.790	0.683	0.452

Power ($n = 3000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	0	0.936	0.868	0.708
WaldDiag,MM3	1000	1000	0	0.845	0.725	0.438
WaldVCF	1000	1000	0	0.931	0.866	0.699
PearsonRS	1000	1000	0	0.959	0.911	0.788
Pearson,MM3	1000	1000	0	0.959	0.909	0.776
RSS,MM3	1000	1000	0	0.963	0.921	0.798
Multn,MM3	1000	1000	0	0.930	0.865	0.697
1F 8V						
Wald	1000	1000	2	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	2	1.000	1.000	1.000
WaldVCF	1000	1000	2	1.000	1.000	1.000
PearsonRS	1000	1000	2	1.000	1.000	1.000
Pearson,MM3	1000	1000	2	1.000	1.000	1.000
RSS,MM3	1000	1000	2	1.000	1.000	1.000
Multn,MM3	1000	1000	2	1.000	1.000	1.000
1F 15V						
Wald	1000	1000	16	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	16	1.000	1.000	1.000
WaldVCF	1000	1000	16	1.000	1.000	1.000
PearsonRS	1000	1000	16	1.000	1.000	1.000
Pearson,MM3	1000	1000	16	1.000	1.000	1.000
RSS,MM3	1000	1000	16	1.000	1.000	1.000
Multn,MM3	1000	1000	16	1.000	1.000	1.000
2F 10V						
Wald	1000	1000	11	0.633	0.500	0.251
WaldDiag,MM3	1000	1000	11	0.637	0.505	0.252
WaldVCF	1000	1000	11	0.578	0.426	0.186
PearsonRS	1000	1000	11	0.770	0.685	0.483
Pearson,MM3	1000	1000	11	0.768	0.675	0.450
RSS,MM3	1000	1000	11	0.770	0.667	0.447
Multn,MM3	1000	1000	11	0.629	0.493	0.246
3F 15V						
Wald	1000	1000	39	0.854	0.775	0.558
WaldDiag,MM3	1000	1000	39	0.837	0.734	0.480
WaldVCF	1000	1000	39	0.800	0.703	0.462
PearsonRS	1000	1000	39	0.941	0.899	0.767
Pearson,MM3	1000	1000	39	0.940	0.893	0.750
RSS,MM3	1000	1000	39	0.938	0.898	0.758
Multn,MM3	1000	1000	39	0.859	0.782	0.583

Cluster sampling

Type I errors ($n = 500$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	12	0.703	0.642	0.488
WaldDiag,MM3	1000	1000	12	0.042	0.016	0.001
WaldVCF	1000	1000	12	0.204	0.130	0.052
PearsonRS	1000	1000	12	0.066	0.031	0.003
Pearson,MM3	1000	1000	12	0.069	0.029	0.002
RSS,MM3	1000	1000	12	0.074	0.022	0.003
Multn,MM3	1000	1000	12	0.191	0.094	0.031
1F 8V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.041	0.011	0.000
WaldVCF	1000	1000	1000	0.999	0.995	0.990
PearsonRS	1000	1000	1000	0.059	0.026	0.001
Pearson,MM3	1000	1000	1000	0.060	0.020	0.000
RSS,MM3	1000	1000	1000	0.045	0.011	0.000
Multn,MM3	1000	1000	1000	0.303	0.209	0.087
1F 15V						
Wald	1000	1000	1000	0.997	0.997	0.962
WaldDiag,MM3	1000	1000	1000	0.005	0.000	0.000
WaldVCF	1000	1000	1000	0.024	0.018	0.012
PearsonRS	1000	1000	1000	0.008	0.001	0.000
Pearson,MM3	1000	1000	1000	0.008	0.001	0.000
RSS,MM3	1000	1000	1000	0.001	0.001	0.000
Multn,MM3	1000	1000	1000	0.007	0.003	0.002
2F 10V						
Wald	1000	1000	1000	1.000	1.000	0.995
WaldDiag,MM3	1000	1000	1000	0.016	0.004	0.000
WaldVCF	1000	1000	1000	0.774	0.718	0.637
PearsonRS	1000	1000	1000	0.032	0.011	0.000
Pearson,MM3	1000	1000	1000	0.031	0.007	0.000
RSS,MM3	1000	1000	1000	0.022	0.003	0.000
Multn,MM3	1000	1000	1000	0.084	0.050	0.017
3F 15V						
Wald	1000	999	1000			
WaldDiag,MM3	1000	999	1000	0.007	0.000	0.000
WaldVCF	1000	999	1000	0.000	0.000	0.000
PearsonRS	1000	999	1000	0.012	0.003	0.000
Pearson,MM3	1000	999	1000	0.012	0.002	0.000
RSS,MM3	1000	999	1000	0.007	0.000	0.000
Multn,MM3	1000	999	1000	0.001	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	0.382	0.294	0.179
WaldDiag,MM3	1000	1000	2	0.091	0.037	0.002
WaldVCF	1000	1000	2	0.165	0.095	0.032
PearsonRS	1000	1000	2	0.102	0.051	0.013
Pearson,MM3	1000	1000	2	0.106	0.048	0.012
RSS,MM3	1000	1000	2	0.107	0.048	0.009
Multn,MM3	1000	1000	2	0.183	0.101	0.038
1F 8V						
Wald	1000	1000	10	0.995	0.991	0.982
WaldDiag,MM3	1000	1000	10	0.066	0.020	0.005
WaldVCF	1000	1000	10	0.701	0.608	0.419
PearsonRS	1000	1000	10	0.070	0.037	0.006
Pearson,MM3	1000	1000	10	0.070	0.034	0.004
RSS,MM3	1000	1000	10	0.066	0.025	0.004
Multn,MM3	1000	1000	10	0.438	0.291	0.103
1F 15V						
Wald	1000	1000	1000	0.999	0.999	0.996
WaldDiag,MM3	1000	1000	1000	0.011	0.000	0.000
WaldVCF	1000	1000	1000	0.757	0.709	0.619
PearsonRS	1000	1000	1000	0.022	0.005	0.000
Pearson,MM3	1000	1000	1000	0.022	0.005	0.000
RSS,MM3	1000	1000	1000	0.016	0.002	0.000
Multn,MM3	1000	1000	1000	0.232	0.153	0.065
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.034	0.008	0.000
WaldVCF	1000	1000	1000	0.993	0.988	0.970
PearsonRS	1000	1000	1000	0.059	0.024	0.004
Pearson,MM3	1000	1000	1000	0.059	0.023	0.002
RSS,MM3	1000	1000	1000	0.042	0.013	0.001
Multn,MM3	1000	1000	1000	0.512	0.371	0.173
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.014	0.003	0.000
WaldVCF	1000	1000	1000	0.424	0.378	0.286
PearsonRS	1000	1000	1000	0.021	0.003	0.000
Pearson,MM3	1000	1000	1000	0.021	0.001	0.000
RSS,MM3	1000	1000	1000	0.014	0.000	0.000
Multn,MM3	1000	1000	1000	0.081	0.044	0.010

Type I errors ($n = 2000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.236	0.158	0.059
WaldDiag,MM3	1000	1000	1	0.102	0.054	0.008
WaldVCF	1000	1000	1	0.144	0.077	0.021
PearsonRS	1000	1000	1	0.099	0.046	0.009
Pearson,MM3	1000	1000	1	0.100	0.044	0.008
RSS,MM3	1000	1000	1	0.100	0.044	0.008
Multn,MM3	1000	1000	1	0.152	0.088	0.026
1F 8V						
Wald	1000	1000	6	0.818	0.746	0.605
WaldDiag,MM3	1000	1000	6	0.081	0.033	0.003
WaldVCF	1000	1000	6	0.347	0.249	0.103
PearsonRS	1000	1000	6	0.082	0.034	0.009
Pearson,MM3	1000	1000	6	0.082	0.032	0.007
RSS,MM3	1000	1000	6	0.074	0.032	0.006
Multn,MM3	1000	1000	6	0.450	0.328	0.168
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.031	0.008	0.001
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.053	0.020	0.000
Pearson,MM3	1000	1000	1000	0.051	0.016	0.000
RSS,MM3	1000	1000	1000	0.040	0.011	0.000
Multn,MM3	1000	1000	1000	0.926	0.853	0.657
2F 10V						
Wald	1000	1000	42	0.975	0.958	0.905
WaldDiag,MM3	1000	1000	42	0.066	0.028	0.002
WaldVCF	1000	1000	42	0.743	0.663	0.448
PearsonRS	1000	1000	42	0.092	0.034	0.009
Pearson,MM3	1000	1000	42	0.092	0.032	0.006
RSS,MM3	1000	1000	42	0.080	0.028	0.007
Multn,MM3	1000	1000	42	0.701	0.585	0.323
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.030	0.010	0.001
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.045	0.019	0.004
Pearson,MM3	1000	1000	1000	0.044	0.017	0.003
RSS,MM3	1000	1000	1000	0.033	0.010	0.000
Multn,MM3	1000	1000	1000	0.880	0.786	0.582

Type I errors ($n = 3000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	3	0.176	0.102	0.024
WaldDiag,MM3	1000	1000	3	0.084	0.032	0.006
WaldVCF	1000	1000	3	0.118	0.058	0.015
PearsonRS	1000	1000	3	0.086	0.043	0.010
Pearson,MM3	1000	1000	3	0.088	0.041	0.009
RSS,MM3	1000	1000	3	0.089	0.039	0.008
Multn,MM3	1000	1000	3	0.130	0.068	0.017
1F 8V						
Wald	1000	1000	8	0.597	0.490	0.286
WaldDiag,MM3	1000	1000	8	0.077	0.034	0.006
WaldVCF	1000	1000	8	0.231	0.144	0.054
PearsonRS	1000	1000	8	0.073	0.031	0.004
Pearson,MM3	1000	1000	8	0.073	0.028	0.003
RSS,MM3	1000	1000	8	0.075	0.024	0.004
Multn,MM3	1000	1000	8	0.352	0.234	0.090
1F 15V						
Wald	1000	1000	137	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	137	0.052	0.013	0.001
WaldVCF	1000	1000	137	1.000	1.000	1.000
PearsonRS	1000	1000	137	0.069	0.029	0.006
Pearson,MM3	1000	1000	137	0.069	0.027	0.004
RSS,MM3	1000	1000	137	0.060	0.022	0.003
Multn,MM3	1000	1000	137	0.901	0.822	0.575
2F 10V						
Wald	1000	1000	26	0.824	0.752	0.594
WaldDiag,MM3	1000	1000	26	0.063	0.026	0.005
WaldVCF	1000	1000	26	0.511	0.389	0.206
PearsonRS	1000	1000	26	0.081	0.032	0.006
Pearson,MM3	1000	1000	26	0.077	0.029	0.004
RSS,MM3	1000	1000	26	0.078	0.028	0.002
Multn,MM3	1000	1000	26	0.588	0.477	0.279
3F 15V						
Wald	1000	1000	204	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	204	0.070	0.029	0.002
WaldVCF	1000	1000	204	1.000	1.000	0.999
PearsonRS	1000	1000	204	0.081	0.036	0.005
Pearson,MM3	1000	1000	204	0.080	0.032	0.004
RSS,MM3	1000	1000	204	0.068	0.027	0.001
Multn,MM3	1000	1000	204	0.945	0.900	0.697

Power ($n = 500$)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.821	0.767	0.635
WaldDiag,MM3	1000	1000	1	0.157	0.055	0.005
WaldVCF	1000	1000	1	0.436	0.313	0.155
PearsonRS	1000	1000	1	0.301	0.176	0.051
Pearson,MM3	1000	1000	1	0.307	0.171	0.044
RSS,MM3	1000	1000	1	0.306	0.172	0.042
Multn,MM3	1000	1000	1	0.328	0.202	0.067
1F 8V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.505	0.308	0.067
WaldVCF	1000	1000	1000	1.000	0.999	0.997
PearsonRS	1000	1000	1000	0.497	0.335	0.119
Pearson,MM3	1000	1000	1000	0.497	0.319	0.101
RSS,MM3	1000	1000	1000	0.516	0.325	0.095
Multn,MM3	1000	1000	1000	0.580	0.448	0.237
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.574	0.286	0.036
WaldVCF	1000	1000	1000	0.062	0.051	0.040
PearsonRS	1000	1000	1000	0.561	0.324	0.073
Pearson,MM3	1000	1000	1000	0.559	0.298	0.056
RSS,MM3	1000	1000	1000	0.569	0.301	0.038
Multn,MM3	1000	1000	1000	0.064	0.033	0.011
2F 10V						
Wald	999	998	999	1.000	1.000	0.997
WaldDiag,MM3	999	998	999	0.050	0.009	0.000
WaldVCF	999	998	999	0.804	0.746	0.650
PearsonRS	999	998	999	0.104	0.039	0.004
Pearson,MM3	999	998	999	0.104	0.036	0.003
RSS,MM3	999	998	999	0.078	0.017	0.002
Multn,MM3	999	998	999	0.102	0.054	0.022
3F 15V						
Wald	1000	999	1000			
WaldDiag,MM3	1000	999	1000	0.022	0.004	0.000
WaldVCF	1000	999	1000	0.000	0.000	0.000
PearsonRS	1000	999	1000	0.071	0.019	0.000
Pearson,MM3	1000	999	1000	0.071	0.014	0.000
RSS,MM3	1000	999	1000	0.038	0.003	0.000
Multn,MM3	1000	999	1000	0.004	0.002	0.000

Power ($n = 1000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	2	0.773	0.683	0.495
WaldDiag,MM3	1000	1000	2	0.357	0.207	0.056
WaldVCF	1000	1000	2	0.560	0.433	0.240
PearsonRS	1000	1000	2	0.558	0.448	0.230
Pearson,MM3	1000	1000	2	0.561	0.442	0.208
RSS,MM3	1000	1000	2	0.567	0.442	0.209
Multn,MM3	1000	1000	2	0.549	0.420	0.228
1F 8V						
Wald	1000	1000	8	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	8	0.936	0.850	0.572
WaldVCF	1000	1000	8	0.989	0.983	0.948
PearsonRS	1000	1000	8	0.918	0.853	0.620
Pearson,MM3	1000	1000	8	0.918	0.848	0.579
RSS,MM3	1000	1000	8	0.939	0.880	0.632
Multn,MM3	1000	1000	8	0.916	0.839	0.610
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.989	0.959	0.717
WaldVCF	1000	1000	1000	0.974	0.965	0.922
PearsonRS	1000	1000	1000	0.988	0.957	0.790
Pearson,MM3	1000	1000	1000	0.988	0.949	0.751
RSS,MM3	1000	1000	1000	0.991	0.965	0.786
Multn,MM3	1000	1000	1000	0.867	0.785	0.557
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.180	0.062	0.007
WaldVCF	1000	1000	1000	0.995	0.995	0.983
PearsonRS	1000	1000	1000	0.275	0.174	0.050
Pearson,MM3	1000	1000	1000	0.274	0.163	0.040
RSS,MM3	1000	1000	1000	0.248	0.133	0.022
Multn,MM3	1000	1000	1000	0.615	0.481	0.275
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.129	0.037	0.000
WaldVCF	1000	1000	1000	0.530	0.465	0.354
PearsonRS	1000	1000	1000	0.303	0.174	0.039
Pearson,MM3	1000	1000	1000	0.302	0.169	0.033
RSS,MM3	1000	1000	1000	0.256	0.123	0.013
Multn,MM3	1000	1000	1000	0.215	0.126	0.038

Power ($n = 2000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	2	0.897	0.834	0.671
WaldDiag,MM3	1000	1000	2	0.686	0.546	0.285
WaldVCF	1000	1000	2	0.831	0.745	0.530
PearsonRS	1000	1000	2	0.880	0.813	0.616
Pearson,MM3	1000	1000	2	0.881	0.812	0.593
RSS,MM3	1000	1000	2	0.884	0.816	0.612
Multn,MM3	1000	1000	2	0.838	0.748	0.541
1F 8V						
Wald	1000	1000	3	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	3	1.000	1.000	0.991
WaldVCF	1000	1000	3	1.000	1.000	0.998
PearsonRS	1000	1000	3	1.000	0.999	0.990
Pearson,MM3	1000	1000	3	1.000	0.999	0.987
RSS,MM3	1000	1000	3	1.000	1.000	0.994
Multn,MM3	1000	1000	3	1.000	1.000	0.998
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	0.999	0.997
2F 10V						
Wald	1000	1000	15	0.998	0.996	0.977
WaldDiag,MM3	1000	1000	15	0.439	0.294	0.094
WaldVCF	1000	1000	15	0.926	0.871	0.742
PearsonRS	1000	1000	15	0.640	0.491	0.272
Pearson,MM3	1000	1000	15	0.638	0.474	0.248
RSS,MM3	1000	1000	15	0.620	0.446	0.209
Multn,MM3	1000	1000	15	0.893	0.800	0.609
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.543	0.374	0.097
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.793	0.669	0.407
Pearson,MM3	1000	1000	1000	0.791	0.654	0.367
RSS,MM3	1000	1000	1000	0.764	0.615	0.316
Multn,MM3	1000	1000	1000	0.980	0.956	0.813

Power ($n = 3000$)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	10%	5%	1%
1F 5V						
Wald	1000	1000	0	0.968	0.937	0.845
WaldDiag,MM3	1000	1000	0	0.887	0.794	0.506
WaldVCF	1000	1000	0	0.952	0.912	0.745
PearsonRS	1000	1000	0	0.971	0.943	0.857
Pearson,MM3	1000	1000	0	0.973	0.941	0.841
RSS,MM3	1000	1000	0	0.978	0.946	0.855
Multn,MM3	1000	1000	0	0.954	0.910	0.775
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	1.000
Pearson,MM3	1000	1000	4	1.000	1.000	1.000
RSS,MM3	1000	1000	4	1.000	1.000	1.000
Multn,MM3	1000	1000	4	1.000	1.000	1.000
1F 15V						
Wald	1000	1000	88	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	88	1.000	1.000	1.000
WaldVCF	1000	1000	88	1.000	1.000	1.000
PearsonRS	1000	1000	88	1.000	1.000	1.000
Pearson,MM3	1000	1000	88	1.000	1.000	1.000
RSS,MM3	1000	1000	88	1.000	1.000	1.000
Multn,MM3	1000	1000	88	1.000	1.000	1.000
2F 10V						
Wald	1000	1000	16	0.972	0.958	0.903
WaldDiag,MM3	1000	1000	16	0.623	0.488	0.235
WaldVCF	1000	1000	16	0.869	0.797	0.624
PearsonRS	1000	1000	16	0.770	0.688	0.496
Pearson,MM3	1000	1000	16	0.769	0.679	0.452
RSS,MM3	1000	1000	16	0.761	0.655	0.426
Multn,MM3	1000	1000	16	0.900	0.829	0.678
3F 15V						
Wald	1000	1000	173	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	173	0.825	0.702	0.387
WaldVCF	1000	1000	173	1.000	1.000	1.000
PearsonRS	1000	1000	173	0.946	0.908	0.782
Pearson,MM3	1000	1000	173	0.945	0.905	0.759
RSS,MM3	1000	1000	173	0.941	0.905	0.726
Multn,MM3	1000	1000	173	0.991	0.978	0.892

Strat-clust sampling

Type I errors ($n = 500$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	6	0.743	0.672	0.563
WaldDiag,MM3	1000	1000	6	0.089	0.051	0.005
WaldVCF	1000	1000	6	0.311	0.232	0.122
PearsonRS	1000	1000	6	0.086	0.046	0.006
Pearson,MM3	1000	1000	6	0.086	0.042	0.005
RSS,MM3	1000	1000	6	0.087	0.038	0.004
Multn,MM3	1000	1000	6	0.175	0.113	0.044
1F 8V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.077	0.030	0.002
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.055	0.020	0.001
Pearson,MM3	1000	1000	1000	0.057	0.016	0.001
RSS,MM3	1000	1000	1000	0.044	0.012	0.000
Multn,MM3	1000	1000	1000	0.273	0.177	0.068
1F 15V						
Wald	1000	1000	1000			
WaldDiag,MM3	1000	1000	1000	0.023	0.001	0.000
WaldVCF	1000	1000	1000	0.115	0.106	0.083
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	0.000	0.000	0.000
Multn,MM3	1000	1000	1000	0.012	0.006	0.000
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.045	0.011	0.000
WaldVCF	1000	1000	1000	0.960	0.947	0.922
PearsonRS	1000	1000	1000	0.028	0.007	0.000
Pearson,MM3	1000	1000	1000	0.028	0.004	0.000
RSS,MM3	1000	1000	1000	0.018	0.004	0.000
Multn,MM3	1000	1000	1000	0.107	0.060	0.021
3F 15V						
Wald	1000	1000	1000			
WaldDiag,MM3	1000	1000	1000	0.010	0.001	0.000
WaldVCF	1000	1000	1000	0.018	0.015	0.009
PearsonRS	1000	1000	1000	0.005	0.000	0.000
Pearson,MM3	1000	1000	1000	0.005	0.000	0.000
RSS,MM3	1000	1000	1000	0.000	0.000	0.000
Multn,MM3	1000	1000	1000	0.016	0.004	0.000

Type I errors ($n = 1000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.360	0.275	0.146
WaldDiag,MM3	1000	1000	1	0.077	0.035	0.003
WaldVCF	1000	1000	1	0.196	0.121	0.041
PearsonRS	1000	1000	1	0.096	0.046	0.006
Pearson,MM3	1000	1000	1	0.097	0.043	0.006
RSS,MM3	1000	1000	1	0.094	0.047	0.006
Multn,MM3	1000	1000	1	0.176	0.104	0.028
1F 8V						
Wald	1000	1000	13	0.996	0.995	0.987
WaldDiag,MM3	1000	1000	13	0.083	0.036	0.003
WaldVCF	1000	1000	13	0.867	0.810	0.691
PearsonRS	1000	1000	13	0.071	0.035	0.005
Pearson,MM3	1000	1000	13	0.071	0.033	0.004
RSS,MM3	1000	1000	13	0.059	0.026	0.005
Multn,MM3	1000	1000	13	0.409	0.291	0.152
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.029	0.007	0.000
WaldVCF	1000	1000	1000	0.999	0.999	0.998
PearsonRS	1000	1000	1000	0.020	0.004	0.000
Pearson,MM3	1000	1000	1000	0.020	0.003	0.000
RSS,MM3	1000	1000	1000	0.016	0.002	0.000
Multn,MM3	1000	1000	1000	0.334	0.201	0.069
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.032	0.013	0.001
WaldVCF	1000	1000	1000	0.999	0.999	0.997
PearsonRS	1000	1000	1000	0.053	0.018	0.003
Pearson,MM3	1000	1000	1000	0.052	0.013	0.003
RSS,MM3	1000	1000	1000	0.038	0.010	0.001
Multn,MM3	1000	1000	1000	0.447	0.318	0.151
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.028	0.007	0.000
WaldVCF	1000	1000	1000	0.978	0.970	0.954
PearsonRS	1000	1000	1000	0.030	0.008	0.000
Pearson,MM3	1000	1000	1000	0.029	0.007	0.000
RSS,MM3	1000	1000	1000	0.020	0.003	0.000
Multn,MM3	1000	1000	1000	0.240	0.139	0.045

Type I errors ($n = 2000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	2	0.211	0.147	0.053
WaldDiag,MM3	1000	1000	2	0.086	0.040	0.005
WaldVCF	1000	1000	2	0.139	0.084	0.026
PearsonRS	1000	1000	2	0.090	0.047	0.014
Pearson,MM3	1000	1000	2	0.090	0.046	0.007
RSS,MM3	1000	1000	2	0.094	0.045	0.007
Multn,MM3	1000	1000	2	0.146	0.081	0.023
1F 8V						
Wald	1000	1000	10	0.762	0.702	0.542
WaldDiag,MM3	1000	1000	10	0.076	0.037	0.004
WaldVCF	1000	1000	10	0.501	0.382	0.209
PearsonRS	1000	1000	10	0.073	0.036	0.010
Pearson,MM3	1000	1000	10	0.073	0.034	0.008
RSS,MM3	1000	1000	10	0.069	0.028	0.007
Multn,MM3	1000	1000	10	0.427	0.318	0.156
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.044	0.009	0.000
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.039	0.012	0.003
Pearson,MM3	1000	1000	1000	0.037	0.011	0.002
RSS,MM3	1000	1000	1000	0.032	0.008	0.001
Multn,MM3	1000	1000	1000	0.864	0.767	0.501
2F 10V						
Wald	1000	1000	39	0.975	0.965	0.922
WaldDiag,MM3	1000	1000	39	0.081	0.032	0.004
WaldVCF	1000	1000	39	0.850	0.797	0.648
PearsonRS	1000	1000	39	0.087	0.040	0.003
Pearson,MM3	1000	1000	39	0.087	0.037	0.003
RSS,MM3	1000	1000	39	0.071	0.024	0.001
Multn,MM3	1000	1000	39	0.649	0.526	0.301
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.034	0.013	0.001
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.033	0.009	0.001
Pearson,MM3	1000	1000	1000	0.033	0.008	0.000
RSS,MM3	1000	1000	1000	0.028	0.009	0.000
Multn,MM3	1000	1000	1000	0.829	0.734	0.477

Type I errors ($n = 3000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	0	0.173	0.112	0.036
WaldDiag,MM3	1000	1000	0	0.096	0.045	0.010
WaldVCF	1000	1000	0	0.133	0.079	0.019
PearsonRS	1000	1000	0	0.089	0.052	0.012
Pearson,MM3	1000	1000	0	0.089	0.050	0.010
RSS,MM3	1000	1000	0	0.088	0.047	0.012
Multn,MM3	1000	1000	0	0.130	0.076	0.020
1F 8V						
Wald	1000	1000	7	0.556	0.452	0.258
WaldDiag,MM3	1000	1000	7	0.085	0.038	0.006
WaldVCF	1000	1000	7	0.341	0.235	0.094
PearsonRS	1000	1000	7	0.096	0.045	0.009
Pearson,MM3	1000	1000	7	0.095	0.041	0.008
RSS,MM3	1000	1000	7	0.085	0.039	0.005
Multn,MM3	1000	1000	7	0.327	0.216	0.091
1F 15V						
Wald	1000	1000	159	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	159	0.069	0.022	0.004
WaldVCF	1000	1000	159	1.000	1.000	1.000
PearsonRS	1000	1000	159	0.059	0.028	0.007
Pearson,MM3	1000	1000	159	0.058	0.025	0.005
RSS,MM3	1000	1000	159	0.052	0.018	0.002
Multn,MM3	1000	1000	159	0.921	0.843	0.626
2F 10V						
Wald	1000	1000	34	0.811	0.753	0.593
WaldDiag,MM3	1000	1000	34	0.081	0.037	0.003
WaldVCF	1000	1000	34	0.621	0.507	0.318
PearsonRS	1000	1000	34	0.084	0.040	0.010
Pearson,MM3	1000	1000	34	0.084	0.035	0.008
RSS,MM3	1000	1000	34	0.072	0.033	0.003
Multn,MM3	1000	1000	34	0.557	0.428	0.228
3F 15V						
Wald	1000	1000	268	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	268	0.054	0.022	0.002
WaldVCF	1000	1000	268	1.000	1.000	1.000
PearsonRS	1000	1000	268	0.054	0.018	0.003
Pearson,MM3	1000	1000	268	0.054	0.016	0.003
RSS,MM3	1000	1000	268	0.045	0.013	0.001
Multn,MM3	1000	1000	268	0.928	0.845	0.622

Power ($n = 500$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	2	0.878	0.831	0.739
WaldDiag,MM3	1000	1000	2	0.178	0.084	0.017
WaldVCF	1000	1000	2	0.515	0.407	0.256
PearsonRS	1000	1000	2	0.274	0.170	0.048
Pearson,MM3	1000	1000	2	0.275	0.165	0.043
RSS,MM3	1000	1000	2	0.282	0.164	0.043
Multn,MM3	1000	1000	2	0.308	0.189	0.085
1F 8V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.633	0.439	0.129
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.476	0.324	0.108
Pearson,MM3	1000	1000	1000	0.478	0.310	0.079
RSS,MM3	1000	1000	1000	0.507	0.328	0.077
Multn,MM3	1000	1000	1000	0.447	0.331	0.194
1F 15V						
Wald	1000	1000	1000			
WaldDiag,MM3	1000	1000	1000	0.716	0.435	0.075
WaldVCF	1000	1000	1000	0.271	0.244	0.203
PearsonRS	1000	1000	1000	0.451	0.212	0.030
Pearson,MM3	1000	1000	1000	0.450	0.188	0.021
RSS,MM3	1000	1000	1000	0.471	0.208	0.018
Multn,MM3	1000	1000	1000	0.090	0.043	0.005
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.091	0.021	0.002
WaldVCF	1000	1000	1000	0.963	0.946	0.925
PearsonRS	1000	1000	1000	0.109	0.041	0.007
Pearson,MM3	1000	1000	1000	0.109	0.038	0.005
RSS,MM3	1000	1000	1000	0.074	0.026	0.001
Multn,MM3	1000	1000	1000	0.151	0.082	0.022
3F 15V						
Wald	1000	1000	1000			
WaldDiag,MM3	1000	1000	1000	0.046	0.002	0.000
WaldVCF	1000	1000	1000	0.018	0.014	0.009
PearsonRS	1000	1000	1000	0.042	0.010	0.000
Pearson,MM3	1000	1000	1000	0.042	0.010	0.000
RSS,MM3	1000	1000	1000	0.025	0.002	0.000
Multn,MM3	1000	1000	1000	0.014	0.002	0.000

Power ($n = 1000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.763	0.692	0.525
WaldDiag,MM3	1000	1000	1	0.380	0.252	0.072
WaldVCF	1000	1000	1	0.605	0.499	0.316
PearsonRS	1000	1000	1	0.575	0.446	0.242
Pearson,MM3	1000	1000	1	0.576	0.444	0.232
RSS,MM3	1000	1000	1	0.580	0.457	0.236
Multn,MM3	1000	1000	1	0.570	0.450	0.251
1F 8V						
Wald	1000	1000	10	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	10	0.958	0.913	0.679
WaldVCF	1000	1000	10	0.999	0.999	0.994
PearsonRS	1000	1000	10	0.919	0.832	0.622
Pearson,MM3	1000	1000	10	0.919	0.820	0.574
RSS,MM3	1000	1000	10	0.943	0.871	0.636
Multn,MM3	1000	1000	10	0.849	0.746	0.539
1F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.997	0.985	0.865
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.987	0.953	0.759
Pearson,MM3	1000	1000	1000	0.987	0.942	0.713
RSS,MM3	1000	1000	1000	0.994	0.968	0.774
Multn,MM3	1000	1000	1000	0.836	0.743	0.497
2F 10V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.206	0.086	0.010
WaldVCF	1000	1000	1000	1.000	1.000	0.999
PearsonRS	1000	1000	1000	0.274	0.162	0.053
Pearson,MM3	1000	1000	1000	0.273	0.155	0.036
RSS,MM3	1000	1000	1000	0.245	0.136	0.024
Multn,MM3	1000	1000	1000	0.533	0.407	0.211
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.172	0.058	0.007
WaldVCF	1000	1000	1000	0.992	0.987	0.977
PearsonRS	1000	1000	1000	0.313	0.168	0.034
Pearson,MM3	1000	1000	1000	0.312	0.157	0.027
RSS,MM3	1000	1000	1000	0.265	0.120	0.014
Multn,MM3	1000	1000	1000	0.403	0.281	0.115

Power ($n = 2000$)

Name	No. repl.	Converged	Rank def.	Rejection rate 10%	5%	1%
1F 5V						
Wald	1000	1000	0	0.874	0.813	0.620
WaldDiag,MM3	1000	1000	0	0.641	0.496	0.228
WaldVCF	1000	1000	0	0.827	0.713	0.496
PearsonRS	1000	1000	0	0.833	0.754	0.542
Pearson,MM3	1000	1000	0	0.834	0.749	0.524
RSS,MM3	1000	1000	0	0.846	0.767	0.543
Multn,MM3	1000	1000	0	0.814	0.699	0.477
1F 8V						
Wald	1000	1000	2	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	2	1.000	1.000	0.994
WaldVCF	1000	1000	2	1.000	1.000	0.999
PearsonRS	1000	1000	2	1.000	0.999	0.985
Pearson,MM3	1000	1000	2	1.000	0.999	0.979
RSS,MM3	1000	1000	2	1.000	1.000	0.992
Multn,MM3	1000	1000	2	1.000	0.999	0.996
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	0.999
RSS,MM3	1000	1000	1000	1.000	1.000	1.000
Multn,MM3	1000	1000	1000	1.000	0.997	0.960
2F 10V						
Wald	1000	1000	14	0.993	0.992	0.982
WaldDiag,MM3	1000	1000	14	0.429	0.280	0.086
WaldVCF	1000	1000	14	0.961	0.932	0.851
PearsonRS	1000	1000	14	0.560	0.440	0.225
Pearson,MM3	1000	1000	14	0.559	0.422	0.199
RSS,MM3	1000	1000	14	0.538	0.404	0.172
Multn,MM3	1000	1000	14	0.857	0.753	0.532
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.531	0.346	0.079
WaldVCF	1000	1000	1000	1.000	1.000	1.000
PearsonRS	1000	1000	1000	0.745	0.605	0.318
Pearson,MM3	1000	1000	1000	0.741	0.591	0.286
RSS,MM3	1000	1000	1000	0.710	0.548	0.215
Multn,MM3	1000	1000	1000	0.953	0.887	0.690

Power ($n = 3000$)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.953	0.912	0.801
WaldDiag,MM3	1000	1000	1	0.869	0.744	0.480
WaldVCF	1000	1000	1	0.941	0.882	0.740
PearsonRS	1000	1000	1	0.960	0.913	0.803
Pearson,MM3	1000	1000	1	0.960	0.911	0.789
RSS,MM3	1000	1000	1	0.964	0.924	0.807
Multn,MM3	1000	1000	1	0.938	0.877	0.730
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	1.000
Pearson,MM3	1000	1000	3	1.000	1.000	1.000
RSS,MM3	1000	1000	3	1.000	1.000	1.000
Multn,MM3	1000	1000	3	1.000	1.000	1.000
1F 15V						
Wald	1000	1000	105	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	105	1.000	1.000	1.000
WaldVCF	1000	1000	105	1.000	1.000	1.000
PearsonRS	1000	1000	105	1.000	1.000	1.000
Pearson,MM3	1000	1000	105	1.000	1.000	1.000
RSS,MM3	1000	1000	105	1.000	1.000	1.000
Multn,MM3	1000	1000	105	1.000	1.000	0.999
2F 10V						
Wald	1000	1000	9	0.982	0.969	0.917
WaldDiag,MM3	1000	1000	9	0.654	0.512	0.230
WaldVCF	1000	1000	9	0.916	0.864	0.731
PearsonRS	1000	1000	9	0.778	0.680	0.455
Pearson,MM3	1000	1000	9	0.775	0.667	0.411
RSS,MM3	1000	1000	9	0.768	0.636	0.379
Multn,MM3	1000	1000	9	0.877	0.820	0.631
3F 15V						
Wald	1000	1000	188	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	188	0.821	0.690	0.361
WaldVCF	1000	1000	188	1.000	1.000	1.000
PearsonRS	1000	1000	188	0.940	0.897	0.727
Pearson,MM3	1000	1000	188	0.938	0.895	0.688
RSS,MM3	1000	1000	188	0.935	0.877	0.664
Multn,MM3	1000	1000	188	0.991	0.975	0.894