Tables of simulation results

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Simple random sampling

Type I errors (n = 500)

				Re	jection r	ate
Name	No. repl.	Converged	Rank def.	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
$\operatorname{WaldVCF}$	1000	1000	1	0.098	0.045	0.008
PearsonRS	1000	1000	1	0.072	0.030	0.004
${\it Pearson}, {\it MM3}$	1000	1000	1	0.073	0.029	0.004
1F 8V						
Wald	1000	1000	0	0.094	0.043	0.008
WaldDiag,MM3	1000	1000	0	0.052	0.023	0.005
$\operatorname{WaldVCF}$	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
1F 15V						
Wald	1000	1000	15	0.102	0.064	0.020
WaldDiag,MM3	1000	1000	15	0.065	0.033	0.008
$\operatorname{WaldVCF}$	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
2F 10V						
Wald	1000	1000	8	0.112	0.053	0.010
WaldDiag,MM3	1000	1000	8	0.026	0.005	0.000
$\operatorname{WaldVCF}$	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
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

Type I errors (n = 1000)

				Re	jection r	ate
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
1F 8V						
Wald	1000	1000	1	0.112	0.067	0.008
${\bf Wald Diag, MM3}$	1000	1000	1	0.083	0.040	0.008
$\operatorname{WaldVCF}$	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
1F 15V						
Wald	1000	1000	6	0.098	0.058	0.017
WaldDiag,MM3	1000	1000	6	0.066	0.042	0.010
$\operatorname{WaldVCF}$	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
2F 10V						
Wald	1000	1000	5	0.101	0.051	0.012
WaldDiag,MM3	1000	1000	5	0.052	0.023	0.002
$\operatorname{WaldVCF}$	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
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

Type I errors (n = 2000)

				Re	jection r	ate
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
$\operatorname{WaldVCF}$	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
1F 8V						
Wald	1000	1000	5	0.099	0.046	0.007
${\bf Wald Diag, MM3}$	1000	1000	5	0.079	0.033	0.008
$\operatorname{WaldVCF}$	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
1F 15V						
Wald	1000	1000	19	0.090	0.045	0.006
WaldDiag,MM3	1000	1000	19	0.067	0.032	0.008
$\operatorname{WaldVCF}$	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
2F 10V						
Wald	1000	1000	16	0.108	0.061	0.009
WaldDiag,MM3	1000	1000	16	0.080	0.042	0.006
$\operatorname{WaldVCF}$	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
3F 15V						
Wald	1000	1000	49	0.110	0.063	0.019
${\bf Wald Diag, MM3}$	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

Type I errors (n = 3000)

				Re	jection r	ate
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
$\operatorname{WaldVCF}$	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
1F 8V						
Wald	1000	1000	2	0.104	0.049	0.005
WaldDiag,MM3	1000	1000	2	0.090	0.043	0.006
$\operatorname{WaldVCF}$	1000	1000	2	0.104	0.048	0.005
PearsonRS	1000	1000	2	0.095	0.050	0.013
${\it Pearson}, {\it MM3}$	1000	1000	2	0.094	0.044	0.010
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
2F 10V						
Wald	1000	1000	15	0.106	0.057	0.010
WaldDiag,MM3	1000	1000	15	0.072	0.043	0.005
$\operatorname{WaldVCF}$	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
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

Power (n = 500)

				Re	jection r	ate
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
$\operatorname{WaldVCF}$	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
1F 8V						
Wald	1000	1000	3	0.818	0.740	0.565
WaldDiag,MM3	1000	1000	3	0.705	0.561	0.302
$\operatorname{WaldVCF}$	1000	1000	3	0.815	0.739	0.561
PearsonRS	1000	1000	3	0.683	0.576	0.342
${\it Pearson}, {\it MM3}$	1000	1000	3	0.681	0.564	0.316
1F 15V						
Wald	1000	1000	6	0.966	0.938	0.861
WaldDiag,MM3	1000	1000	6	0.932	0.883	0.756
$\operatorname{WaldVCF}$	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
2F 10V						
Wald	1000	1000	11	0.189	0.123	0.030
WaldDiag,MM3	1000	1000	11	0.108	0.044	0.009
$\operatorname{WaldVCF}$	1000	1000	11	0.178	0.117	0.027
PearsonRS	1000	1000	11	0.219	0.143	0.053
${\it Pearson}, {\it MM3}$	1000	1000	11	0.217	0.136	0.045
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

Power (n = 1000)

				Re	jection r	ate
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
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
1F 15V						
Wald	1000	1000	8	1.000	1.000	0.997
WaldDiag,MM3	1000	1000	8	1.000	0.999	0.993
$\operatorname{WaldVCF}$	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
2F 10V						
Wald	1000	1000	13	0.314	0.210	0.090
WaldDiag,MM3	1000	1000	13	0.272	0.166	0.059
$\operatorname{WaldVCF}$	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
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

Power (n = 2000)

				Re	jection r	ate
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
$\operatorname{WaldVCF}$	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
1F 8V						
Wald	1000	1000	4	1.000	1.000	0.999
${\bf Wald Diag, MM3}$	1000	1000	4	1.000	1.000	0.995
$\operatorname{WaldVCF}$	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
1F 15V						
Wald	1000	1000	14	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	14	1.000	1.000	1.000
$\operatorname{WaldVCF}$	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
2F 10V						
Wald	1000	1000	10	0.534	0.424	0.260
WaldDiag,MM3	1000	1000	10	0.527	0.418	0.250
$\operatorname{WaldVCF}$	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
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

Power (n = 3000)

				Re	jection r	ate
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
$\operatorname{WaldVCF}$	1000	1000	0	0.923	0.879	0.739
PearsonRS	1000	1000	0	0.933	0.891	0.770
${\it Pearson}, {\it MM3}$	1000	1000	0	0.933	0.889	0.756
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
${\it Pearson}, {\it MM3}$	1000	1000	3	1.000	1.000	0.997
1F 15V						
Wald	1000	1000	15	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	15	1.000	1.000	1.000
$\operatorname{WaldVCF}$	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
2F 10V						
Wald	1000	1000	12	0.651	0.557	0.393
WaldDiag,MM3	1000	1000	12	0.680	0.567	0.397
$\operatorname{WaldVCF}$	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
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

Stratified sampling

Type I errors (n = 500)

				Re	jection r	ate
Name	No. repl.	Converged	Rank def.	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
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
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
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
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

Type I errors (n = 1000)

				Re	jection r	ate
Name	No. repl.	Converged	Rank def.	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
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
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
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
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

Type I errors (n = 2000)

				Re	jection r	ate
Name	No. repl.	Converged	Rank def.	10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.115	0.060	0.011
${\bf Wald Diag, MM3}$	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
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
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
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
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

Type I errors (n = 3000)

				Re	jection r	ate
Name	No. repl.	Converged	Rank def.	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
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
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
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
3F 15V						
Wald	1000	1000	55	0.252	0.144	0.040
WaldDiag,MM3	1000	1000	55	0.078	0.040	0.006
$\operatorname{WaldVCF}$	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

Power (n = 500)

				Re	jection r	ate
Name	No. repl.	Converged	Rank def.	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
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
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
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
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

Power (n = 1000)

				Re	jection r	ate
Name	No. repl.	Converged	Rank def.	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
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
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
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
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

Power (n = 2000)

				Re	jection r	ate
Name	No. repl.	Converged	Rank def.	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
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
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
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
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

Power (n = 3000)

				Re	jection r	ate
Name	No. repl.	Converged	Rank def.	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
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
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
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
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

Cluster sampling

Type I errors (n = 500)

				Re	jection r	ate
Name	No. repl.	Converged	Rank def.	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
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
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
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
3F 15V						
Wald	1000	999	1000			
WaldDiag,MM3	1000	999	1000	0.007	0.000	0.000
$\operatorname{WaldVCF}$	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

Type I errors (n = 1000)

				Re	ejection r	ate
Name	No. repl.	Converged	Rank def.	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
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
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
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
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

Type I errors (n = 2000)

				Re	ejection r	ate
Name	No. repl.	Converged	Rank def.	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
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
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
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
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

Type I errors (n = 3000)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	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
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
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
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
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

Power (n = 500)

				Re	ejection r	ate
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
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
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
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
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

Power (n = 1000)

			Rank def.	Re	ejection r	ate
Name	No. repl. Converge	Converged		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
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
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
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
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.129	0.037	0.000
$\operatorname{WaldVCF}$	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

Power (n = 2000)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	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
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
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
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
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.543	0.374	0.097
$\operatorname{WaldVCF}$	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

Power (n = 3000)

Name				Rejection rate		
	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
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
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
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
3F 15V						
Wald	1000	1000	173	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	173	0.825	0.702	0.387
$\operatorname{WaldVCF}$	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

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	0.743	0.672	0.563	
${\bf WaldDiag,} {\bf MM3}$	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	
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	
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	
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	
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	

Type I errors (n = 1000)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	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
${\it Pearson}, {\it MM3}$	1000	1000	1	0.097	0.043	0.006
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
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
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
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.028	0.007	0.000
$\operatorname{WaldVCF}$	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

Type I errors (n = 2000)

				Re	ejection r	ate
Name	No. repl.	Converged	Rank def.	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
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
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
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
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.034	0.013	0.001
$\operatorname{WaldVCF}$	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

Type I errors (n = 3000)

				Rejection rate		
Name	No. repl.	Converged	Rank def.	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
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
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
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
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

Power (n = 500)

				Re	ejection r	ate
Name	No. repl.	Converged	Rank def.	10%	5%	1%
1F 5V						
Wald	1000	1000	2	0.878	0.831	0.739
${\it WaldDiag,MM3}$	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
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
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
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
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

Power (n = 1000)

				Rejection r		ate
Name	No. repl.	Converged	Rank def.	10%	5%	1%
1F 5V						
Wald	1000	1000	1	0.763	0.692	0.525
${\it WaldDiag,MM3}$	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
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
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
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
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

Power (n = 2000)

Name			Rank def.	Rejection rate		
	No. repl.	Converged		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
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
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
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
3F 15V						
Wald	1000	1000	1000	1.000	1.000	1.000
WaldDiag,MM3	1000	1000	1000	0.531	0.346	0.079
$\operatorname{WaldVCF}$	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

Power (n = 3000)

				Re	ate	
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
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
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
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
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