

# Tables of simulation results

## Contents

Simple random sampling . . . . .	3
Type I errors ( $n = 500$ ) . . . . .	3
Type I errors ( $n = 1000$ ) . . . . .	4
Type I errors ( $n = 2000$ ) . . . . .	5
Type I errors ( $n = 3000$ ) . . . . .	6
Type I errors ( $n = 5000$ ) . . . . .	7
Type I errors ( $n = 10000$ ) . . . . .	8
Power ( $n = 500$ ) . . . . .	9
Power ( $n = 1000$ ) . . . . .	10
Power ( $n = 2000$ ) . . . . .	11
Power ( $n = 3000$ ) . . . . .	12
Power ( $n = 5000$ ) . . . . .	13
Power ( $n = 10000$ ) . . . . .	13
Stratified sampling . . . . .	14
Type I errors ( $n = 500$ ) . . . . .	14
Type I errors ( $n = 1000$ ) . . . . .	15
Type I errors ( $n = 2000$ ) . . . . .	16
Type I errors ( $n = 3000$ ) . . . . .	17
Type I errors ( $n = 5000$ ) . . . . .	18
Type I errors ( $n = 10000$ ) . . . . .	19
Power ( $n = 500$ ) . . . . .	20
Power ( $n = 1000$ ) . . . . .	21
Power ( $n = 2000$ ) . . . . .	22
Power ( $n = 3000$ ) . . . . .	23
Power ( $n = 5000$ ) . . . . .	24
Power ( $n = 10000$ ) . . . . .	24
Cluster sampling . . . . .	25
Type I errors ( $n = 500$ ) . . . . .	25
Type I errors ( $n = 1000$ ) . . . . .	26

Type I errors ( $n = 2000$ ) . . . . .	27
Type I errors ( $n = 3000$ ) . . . . .	28
Type I errors ( $n = 5000$ ) . . . . .	29
Type I errors ( $n = 10000$ ) . . . . .	30
Power ( $n = 500$ ) . . . . .	31
Power ( $n = 1000$ ) . . . . .	32
Power ( $n = 2000$ ) . . . . .	33
Power ( $n = 3000$ ) . . . . .	34
Power ( $n = 5000$ ) . . . . .	35
Power ( $n = 10000$ ) . . . . .	35
Strat-clust sampling . . . . .	36
Type I errors ( $n = 500$ ) . . . . .	36
Type I errors ( $n = 1000$ ) . . . . .	37
Type I errors ( $n = 2000$ ) . . . . .	38
Type I errors ( $n = 3000$ ) . . . . .	39
Type I errors ( $n = 5000$ ) . . . . .	40
Type I errors ( $n = 10000$ ) . . . . .	41
Power ( $n = 500$ ) . . . . .	42
Power ( $n = 1000$ ) . . . . .	43
Power ( $n = 2000$ ) . . . . .	44
Power ( $n = 3000$ ) . . . . .	45
Power ( $n = 5000$ ) . . . . .	46
Power ( $n = 10000$ ) . . . . .	46

Download the L<sup>A</sup>T<sub>E</sub>Xsource from this link.

## Simple random sampling

Type I errors ( $n = 500$ )

	Name	No. repl.	Converged	Rank def.	Rejection rate		
					10%	5%	1%
1F 5V							
	Wald	1000	1000	2	0.100	0.045	0.008
	WaldVCF	1000	1000	2	0.098	0.045	0.008
	WaldDiag,MM3	1000	1000	2	0.032	0.007	0.000
	WaldDiag,RS2	1000	1000	2	0.032	0.008	0.000
	Pearson,MM3	1000	1000	2	0.073	0.029	0.004
	Pearson,RS2	1000	1000	2	0.072	0.030	0.004
1F 8V							
	Wald	1000	1000	0	0.094	0.043	0.008
	WaldVCF	1000	1000	0	0.092	0.041	0.008
	WaldDiag,MM3	1000	1000	0	0.052	0.023	0.005
	WaldDiag,RS2	1000	1000	0	0.054	0.024	0.005
	Pearson,MM3	1000	1000	0	0.086	0.038	0.004
	Pearson,RS2	1000	1000	0	0.086	0.043	0.005
1F 15V							
	Wald	1000	1000	15	0.102	0.064	0.020
	WaldVCF	1000	1000	15	0.101	0.061	0.019
	WaldDiag,MM3	1000	1000	15	0.065	0.033	0.008
	WaldDiag,RS2	1000	1000	15	0.066	0.034	0.009
	Pearson,MM3	1000	1000	15	0.093	0.043	0.010
	Pearson,RS2	1000	1000	15	0.094	0.047	0.011
2F 10V							
	Wald	1000	1000	8	0.112	0.053	0.010
	WaldVCF	1000	1000	8	0.105	0.051	0.008
	WaldDiag,MM3	1000	1000	8	0.026	0.005	0.000
	WaldDiag,RS2	1000	1000	8	0.028	0.005	0.000
	Pearson,MM3	1000	1000	8	0.081	0.044	0.009
	Pearson,RS2	1000	1000	8	0.081	0.045	0.009
3F 15V							
	Wald	1000	1000	24	0.113	0.063	0.005
	WaldVCF	1000	1000	24	0.106	0.058	0.004
	WaldDiag,MM3	1000	1000	24	0.025	0.008	0.000
	WaldDiag,RS2	1000	1000	24	0.026	0.009	0.000
	Pearson,MM3	1000	1000	24	0.091	0.050	0.008
	Pearson,RS2	1000	1000	24	0.093	0.053	0.009

Type I errors ( $n = 1000$ )

	Name	No. repl.	Converged	Rank def.	Rejection rate		
					10%	5%	1%
1F 5V							
	Wald	1000	1000	0	0.116	0.064	0.008
	WaldVCF	1000	1000	0	0.114	0.061	0.008
	WaldDiag,MM3	1000	1000	0	0.065	0.031	0.003
	WaldDiag,RS2	1000	1000	0	0.064	0.032	0.003
	Pearson,MM3	1000	1000	0	0.087	0.046	0.012
	Pearson,RS2	1000	1000	0	0.087	0.050	0.014
1F 8V							
	Wald	1000	1000	1	0.112	0.067	0.008
	WaldVCF	1000	1000	1	0.111	0.066	0.008
	WaldDiag,MM3	1000	1000	1	0.083	0.040	0.008
	WaldDiag,RS2	1000	1000	1	0.083	0.041	0.009
	Pearson,MM3	1000	1000	1	0.094	0.039	0.004
	Pearson,RS2	1000	1000	1	0.096	0.043	0.008
1F 15V							
	Wald	1000	1000	7	0.098	0.058	0.017
	WaldVCF	1000	1000	7	0.097	0.058	0.016
	WaldDiag,MM3	1000	1000	7	0.066	0.042	0.010
	WaldDiag,RS2	1000	1000	7	0.067	0.042	0.011
	Pearson,MM3	1000	1000	7	0.094	0.045	0.013
	Pearson,RS2	1000	1000	7	0.095	0.048	0.014
2F 10V							
	Wald	1000	1000	5	0.101	0.051	0.012
	WaldVCF	1000	1000	5	0.097	0.050	0.011
	WaldDiag,MM3	1000	1000	5	0.052	0.023	0.002
	WaldDiag,RS2	1000	1000	5	0.054	0.023	0.003
	Pearson,MM3	1000	1000	5	0.104	0.056	0.014
	Pearson,RS2	1000	1000	5	0.105	0.061	0.016
3F 15V							
	Wald	1000	1000	34	0.115	0.061	0.013
	WaldVCF	1000	1000	34	0.109	0.056	0.013
	WaldDiag,MM3	1000	1000	34	0.057	0.025	0.006
	WaldDiag,RS2	1000	1000	34	0.057	0.026	0.007
	Pearson,MM3	1000	1000	34	0.108	0.064	0.012
	Pearson,RS2	1000	1000	34	0.111	0.067	0.017

Type I errors ( $n = 2000$ )

	Name	No. repl.	Converged	Rank def.	Rejection rate		
					10%	5%	1%
1F 5V							
	Wald	1000	1000	0	0.097	0.046	0.015
	WaldVCF	1000	1000	0	0.096	0.046	0.015
	WaldDiag,MM3	1000	1000	0	0.067	0.029	0.010
	WaldDiag,RS2	1000	1000	0	0.066	0.030	0.013
	Pearson,MM3	1000	1000	0	0.090	0.048	0.014
	Pearson,RS2	1000	1000	0	0.088	0.049	0.015
1F 8V							
	Wald	1000	1000	4	0.099	0.046	0.007
	WaldVCF	1000	1000	4	0.099	0.046	0.007
	WaldDiag,MM3	1000	1000	4	0.079	0.033	0.008
	WaldDiag,RS2	1000	1000	4	0.081	0.036	0.009
	Pearson,MM3	1000	1000	4	0.097	0.053	0.009
	Pearson,RS2	1000	1000	4	0.097	0.059	0.012
1F 15V							
	Wald	1000	1000	19	0.090	0.045	0.006
	WaldVCF	1000	1000	19	0.089	0.045	0.006
	WaldDiag,MM3	1000	1000	19	0.067	0.032	0.008
	WaldDiag,RS2	1000	1000	19	0.067	0.034	0.008
	Pearson,MM3	1000	1000	19	0.103	0.052	0.013
	Pearson,RS2	1000	1000	19	0.104	0.057	0.015
2F 10V							
	Wald	1000	1000	15	0.108	0.061	0.009
	WaldVCF	1000	1000	15	0.107	0.059	0.008
	WaldDiag,MM3	1000	1000	15	0.080	0.042	0.006
	WaldDiag,RS2	1000	1000	15	0.081	0.044	0.009
	Pearson,MM3	1000	1000	15	0.086	0.046	0.009
	Pearson,RS2	1000	1000	15	0.087	0.050	0.011
3F 15V							
	Wald	1000	1000	47	0.110	0.063	0.019
	WaldVCF	1000	1000	47	0.096	0.058	0.016
	WaldDiag,MM3	1000	1000	47	0.072	0.043	0.007
	WaldDiag,RS2	1000	1000	47	0.076	0.044	0.009
	Pearson,MM3	1000	1000	47	0.108	0.048	0.011
	Pearson,RS2	1000	1000	47	0.110	0.050	0.012

Type I errors ( $n = 3000$ )

	Name	No. repl.	Converged	Rank def.	Rejection rate		
					10%	5%	1%
1F 5V							
	Wald	1000	1000	1	0.092	0.051	0.005
	WaldVCF	1000	1000	1	0.090	0.050	0.005
	WaldDiag,MM3	1000	1000	1	0.072	0.036	0.002
	WaldDiag,RS2	1000	1000	1	0.071	0.037	0.003
	Pearson,MM3	1000	1000	1	0.085	0.044	0.007
	Pearson,RS2	1000	1000	1	0.084	0.045	0.008
1F 8V							
	Wald	1000	1000	1	0.104	0.049	0.005
	WaldVCF	1000	1000	1	0.104	0.048	0.005
	WaldDiag,MM3	1000	1000	1	0.090	0.043	0.006
	WaldDiag,RS2	1000	1000	1	0.092	0.045	0.006
	Pearson,MM3	1000	1000	1	0.094	0.044	0.010
	Pearson,RS2	1000	1000	1	0.095	0.050	0.013
1F 15V							
	Wald	1000	1000	27	0.109	0.059	0.006
	WaldVCF	1000	1000	27	0.107	0.056	0.006
	WaldDiag,MM3	1000	1000	27	0.097	0.049	0.010
	WaldDiag,RS2	1000	1000	27	0.097	0.051	0.012
	Pearson,MM3	1000	1000	27	0.107	0.049	0.011
	Pearson,RS2	1000	1000	27	0.108	0.050	0.015
2F 10V							
	Wald	1000	1000	16	0.106	0.057	0.010
	WaldVCF	1000	1000	16	0.104	0.051	0.009
	WaldDiag,MM3	1000	1000	16	0.072	0.043	0.005
	WaldDiag,RS2	1000	1000	16	0.073	0.043	0.006
	Pearson,MM3	1000	1000	16	0.088	0.035	0.011
	Pearson,RS2	1000	1000	16	0.092	0.037	0.012
3F 15V							
	Wald	1000	1000	47	0.117	0.059	0.010
	WaldVCF	1000	1000	47	0.104	0.056	0.010
	WaldDiag,MM3	1000	1000	47	0.086	0.038	0.007
	WaldDiag,RS2	1000	1000	47	0.086	0.040	0.008
	Pearson,MM3	1000	1000	47	0.098	0.053	0.012
	Pearson,RS2	1000	1000	47	0.100	0.054	0.015

Type I errors ( $n = 5000$ )

	Name	No. repl.	Converged	Rank def.	Rejection rate		
					10%	5%	1%
1F 5V							
	Wald	1000	1000	1	0.105	0.051	0.014
	WaldVCF	1000	1000	1	0.102	0.051	0.014
	WaldDiag,MM3	1000	1000	1	0.098	0.054	0.015
	WaldDiag,RS2	1000	1000	1	0.097	0.056	0.015
	Pearson,MM3	1000	1000	1	0.105	0.060	0.015
	Pearson,RS2	1000	1000	1	0.105	0.060	0.019
1F 8V							
	Wald	1000	1000	6	0.091	0.043	0.006
	WaldVCF	1000	1000	6	0.090	0.041	0.006
	WaldDiag,MM3	1000	1000	6	0.068	0.032	0.003
	WaldDiag,RS2	1000	1000	6	0.068	0.032	0.004
	Pearson,MM3	1000	1000	6	0.094	0.047	0.011
	Pearson,RS2	1000	1000	6	0.095	0.048	0.012
1F 15V							
	Wald	1000	1000	24	0.103	0.046	0.012
	WaldVCF	1000	1000	24	0.099	0.043	0.012
	WaldDiag,MM3	1000	1000	24	0.092	0.046	0.012
	WaldDiag,RS2	1000	1000	24	0.094	0.047	0.012
	Pearson,MM3	1000	1000	24	0.105	0.056	0.011
	Pearson,RS2	1000	1000	24	0.105	0.059	0.011
2F 10V							
	Wald	1000	1000	17	0.104	0.045	0.008
	WaldVCF	1000	1000	17	0.097	0.044	0.007
	WaldDiag,MM3	1000	1000	17	0.072	0.036	0.007
	WaldDiag,RS2	1000	1000	17	0.074	0.038	0.008
	Pearson,MM3	1000	1000	17	0.090	0.038	0.009
	Pearson,RS2	1000	1000	17	0.091	0.041	0.012
3F 15V							
	Wald	1000	1000	63	0.111	0.049	0.007
	WaldVCF	1000	1000	63	0.094	0.044	0.007
	WaldDiag,MM3	1000	1000	63	0.070	0.036	0.007
	WaldDiag,RS2	1000	1000	63	0.072	0.037	0.008
	Pearson,MM3	1000	1000	63	0.089	0.045	0.015
	Pearson,RS2	1000	1000	63	0.090	0.050	0.016

Type I errors ( $n = 10000$ )

	Name	No. repl.	Converged	Rank def.	Rejection rate		
					10%	5%	1%
1F 5V							
	Wald	1000	1000	1	0.098	0.049	0.005
	WaldVCF	1000	1000	1	0.098	0.046	0.005
	WaldDiag,MM3	1000	1000	1	0.083	0.044	0.008
	WaldDiag,RS2	1000	1000	1	0.083	0.048	0.010
	Pearson,MM3	1000	1000	1	0.102	0.055	0.011
	Pearson,RS2	1000	1000	1	0.100	0.056	0.013
1F 8V							
	Wald	1000	1000	11	0.095	0.050	0.014
	WaldVCF	1000	1000	11	0.095	0.048	0.014
	WaldDiag,MM3	1000	1000	11	0.084	0.041	0.013
	WaldDiag,RS2	1000	1000	11	0.084	0.044	0.013
	Pearson,MM3	1000	1000	11	0.092	0.041	0.007
	Pearson,RS2	1000	1000	11	0.092	0.042	0.011
1F 15V							
	Wald	1000	1000	36	0.104	0.046	0.009
	WaldVCF	1000	1000	36	0.102	0.045	0.009
	WaldDiag,MM3	1000	1000	36	0.085	0.040	0.008
	WaldDiag,RS2	1000	1000	36	0.086	0.041	0.008
	Pearson,MM3	1000	1000	36	0.090	0.043	0.005
	Pearson,RS2	1000	1000	36	0.092	0.045	0.006
2F 10V							
	Wald	1000	1000	26	0.095	0.038	0.006
	WaldVCF	1000	1000	26	0.090	0.035	0.006
	WaldDiag,MM3	1000	1000	26	0.088	0.038	0.009
	WaldDiag,RS2	1000	1000	26	0.088	0.043	0.009
	Pearson,MM3	1000	1000	26	0.080	0.037	0.011
	Pearson,RS2	1000	1000	26	0.080	0.041	0.012
3F 15V							
	Wald	1000	1000	79	0.116	0.061	0.012
	WaldVCF	1000	1000	79	0.107	0.053	0.011
	WaldDiag,MM3	1000	1000	79	0.094	0.045	0.009
	WaldDiag,RS2	1000	1000	79	0.095	0.050	0.012
	Pearson,MM3	1000	1000	79	0.102	0.051	0.011
	Pearson,RS2	1000	1000	79	0.104	0.051	0.014



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
	WaldVCF	1000	1000	0	0.327	0.225	0.089
	WaldDiag,MM3	1000	1000	0	0.135	0.058	0.011
	WaldDiag,RS2	1000	1000	0	0.135	0.059	0.012
	Pearson,MM3	1000	1000	0	0.333	0.217	0.089
	Pearson,RS2	1000	1000	0	0.331	0.223	0.100
1F 8V							
	Wald	1000	1000	0	0.610	0.494	0.281
	WaldVCF	1000	1000	0	0.610	0.492	0.278
	WaldDiag,MM3	1000	1000	0	0.409	0.276	0.095
	WaldDiag,RS2	1000	1000	0	0.409	0.279	0.104
	Pearson,MM3	1000	1000	0	0.359	0.225	0.074
	Pearson,RS2	1000	1000	0	0.360	0.232	0.085
1F 15V							
	Wald	1000	1000	8	0.415	0.307	0.132
	WaldVCF	1000	1000	8	0.406	0.302	0.129
	WaldDiag,MM3	1000	1000	8	0.279	0.186	0.061
	WaldDiag,RS2	1000	1000	8	0.280	0.191	0.068
	Pearson,MM3	1000	1000	8	0.586	0.448	0.253
	Pearson,RS2	1000	1000	8	0.588	0.452	0.268
2F 10V							
	Wald	1000	1000	11	0.189	0.123	0.030
	WaldVCF	1000	1000	11	0.178	0.117	0.027
	WaldDiag,MM3	1000	1000	11	0.108	0.044	0.009
	WaldDiag,RS2	1000	1000	11	0.111	0.046	0.011
	Pearson,MM3	1000	1000	11	0.217	0.136	0.045
	Pearson,RS2	1000	1000	11	0.219	0.143	0.053
3F 15V							
	Wald	1000	1000	26	0.222	0.152	0.056
	WaldVCF	1000	1000	26	0.213	0.146	0.053
	WaldDiag,MM3	1000	1000	26	0.136	0.081	0.021
	WaldDiag,RS2	1000	1000	26	0.139	0.084	0.024
	Pearson,MM3	1000	1000	26	0.266	0.168	0.058
	Pearson,RS2	1000	1000	26	0.269	0.172	0.071

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
	WaldVCF	1000	1000	0	0.527	0.419	0.226
	WaldDiag,MM3	1000	1000	0	0.376	0.240	0.077
	WaldDiag,RS2	1000	1000	0	0.375	0.245	0.083
	Pearson,MM3	1000	1000	0	0.545	0.446	0.258
	Pearson,RS2	1000	1000	0	0.545	0.452	0.264
1F 8V							
	Wald	1000	1000	1	0.898	0.832	0.665
	WaldVCF	1000	1000	1	0.896	0.830	0.661
	WaldDiag,MM3	1000	1000	1	0.764	0.669	0.372
	WaldDiag,RS2	1000	1000	1	0.769	0.679	0.394
	Pearson,MM3	1000	1000	1	0.646	0.504	0.263
	Pearson,RS2	1000	1000	1	0.647	0.515	0.287
1F 15V							
	Wald	1000	1000	6	0.715	0.615	0.396
	WaldVCF	1000	1000	6	0.710	0.610	0.391
	WaldDiag,MM3	1000	1000	6	0.589	0.475	0.247
	WaldDiag,RS2	1000	1000	6	0.593	0.480	0.264
	Pearson,MM3	1000	1000	6	0.881	0.810	0.633
	Pearson,RS2	1000	1000	6	0.883	0.813	0.648
2F 10V							
	Wald	1000	1000	13	0.314	0.210	0.090
	WaldVCF	1000	1000	13	0.297	0.199	0.082
	WaldDiag,MM3	1000	1000	13	0.272	0.166	0.059
	WaldDiag,RS2	1000	1000	13	0.273	0.173	0.068
	Pearson,MM3	1000	1000	13	0.388	0.284	0.141
	Pearson,RS2	1000	1000	13	0.391	0.295	0.154
3F 15V							
	Wald	1000	1000	25	0.399	0.298	0.143
	WaldVCF	1000	1000	25	0.381	0.285	0.126
	WaldDiag,MM3	1000	1000	25	0.379	0.265	0.127
	WaldDiag,RS2	1000	1000	25	0.380	0.271	0.135
	Pearson,MM3	1000	1000	25	0.498	0.383	0.216
	Pearson,RS2	1000	1000	25	0.498	0.396	0.226

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
	WaldVCF	1000	1000	0	0.796	0.708	0.510
	WaldDiag,MM3	1000	1000	0	0.672	0.543	0.284
	WaldDiag,RS2	1000	1000	0	0.669	0.548	0.297
	Pearson,MM3	1000	1000	0	0.811	0.744	0.537
	Pearson,RS2	1000	1000	0	0.811	0.749	0.552
1F 8V							
	Wald	1000	1000	0	0.995	0.986	0.973
	WaldVCF	1000	1000	0	0.995	0.986	0.973
	WaldDiag,MM3	1000	1000	0	0.983	0.972	0.885
	WaldDiag,RS2	1000	1000	0	0.983	0.972	0.900
	Pearson,MM3	1000	1000	0	0.950	0.890	0.701
	Pearson,RS2	1000	1000	0	0.950	0.892	0.728
1F 15V							
	Wald	1000	1000	7	0.958	0.932	0.835
	WaldVCF	1000	1000	7	0.956	0.932	0.831
	WaldDiag,MM3	1000	1000	7	0.921	0.877	0.695
	WaldDiag,RS2	1000	1000	7	0.921	0.879	0.711
	Pearson,MM3	1000	1000	7	0.995	0.988	0.951
	Pearson,RS2	1000	1000	7	0.995	0.989	0.958
2F 10V							
	Wald	1000	1000	10	0.534	0.424	0.260
	WaldVCF	1000	1000	10	0.520	0.406	0.240
	WaldDiag,MM3	1000	1000	10	0.527	0.418	0.250
	WaldDiag,RS2	1000	1000	10	0.534	0.425	0.264
	Pearson,MM3	1000	1000	10	0.609	0.505	0.340
	Pearson,RS2	1000	1000	10	0.611	0.513	0.372
3F 15V							
	Wald	1000	1000	42	0.662	0.575	0.384
	WaldVCF	1000	1000	42	0.650	0.552	0.363
	WaldDiag,MM3	1000	1000	42	0.698	0.592	0.400
	WaldDiag,RS2	1000	1000	42	0.700	0.600	0.421
	Pearson,MM3	1000	1000	42	0.768	0.686	0.515
	Pearson,RS2	1000	1000	42	0.769	0.689	0.531

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
	WaldVCF	1000	1000	0	0.923	0.879	0.739
	WaldDiag,MM3	1000	1000	0	0.854	0.782	0.546
	WaldDiag,RS2	1000	1000	0	0.853	0.785	0.565
	Pearson,MM3	1000	1000	0	0.933	0.889	0.756
	Pearson,RS2	1000	1000	0	0.933	0.891	0.770
1F 8V							
	Wald	1000	1000	3	1.000	1.000	0.998
	WaldVCF	1000	1000	3	1.000	1.000	0.998
	WaldDiag,MM3	1000	1000	3	1.000	0.998	0.990
	WaldDiag,RS2	1000	1000	3	1.000	0.998	0.990
	Pearson,MM3	1000	1000	3	0.992	0.978	0.923
	Pearson,RS2	1000	1000	3	0.992	0.979	0.930
1F 15V							
	Wald	1000	1000	14	0.997	0.994	0.982
	WaldVCF	1000	1000	14	0.997	0.993	0.981
	WaldDiag,MM3	1000	1000	14	0.996	0.987	0.938
	WaldDiag,RS2	1000	1000	14	0.996	0.988	0.946
	Pearson,MM3	1000	1000	14	0.999	0.999	0.997
	Pearson,RS2	1000	1000	14	0.999	0.999	0.998
2F 10V							
	Wald	1000	1000	12	0.651	0.557	0.393
	WaldVCF	1000	1000	12	0.636	0.541	0.373
	WaldDiag,MM3	1000	1000	12	0.680	0.567	0.397
	WaldDiag,RS2	1000	1000	12	0.680	0.578	0.410
	Pearson,MM3	1000	1000	12	0.709	0.635	0.473
	Pearson,RS2	1000	1000	12	0.710	0.646	0.497
3F 15V							
	Wald	1000	1000	39	0.812	0.731	0.578
	WaldVCF	1000	1000	39	0.801	0.718	0.557
	WaldDiag,MM3	1000	1000	39	0.844	0.784	0.622
	WaldDiag,RS2	1000	1000	39	0.845	0.787	0.644
	Pearson,MM3	1000	1000	39	0.869	0.811	0.682
	Pearson,RS2	1000	1000	39	0.871	0.817	0.700

**Power** ( $n = 5000$ )

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

**Power** ( $n = 10000$ )

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

## Stratified sampling

Type I errors ( $n = 500$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.178	0.108	0.032
WaldVCF	1000	1000	1	0.148	0.075	0.015
WaldDiag,MM3	1000	1000	1	0.065	0.025	0.002
WaldDiag,RS2	1000	1000	1	0.061	0.025	0.002
Pearson,MM3	1000	1000	1	0.118	0.060	0.010
Pearson,RS2	1000	1000	1	0.117	0.059	0.011
<b>1F 8V</b>						
Wald	1000	1000	5	0.353	0.241	0.105
WaldVCF	1000	1000	5	0.178	0.107	0.031
WaldDiag,MM3	1000	1000	5	0.087	0.043	0.007
WaldDiag,RS2	1000	1000	5	0.087	0.043	0.009
Pearson,MM3	1000	1000	5	0.177	0.107	0.023
Pearson,RS2	1000	1000	5	0.175	0.110	0.029
<b>1F 15V</b>						
Wald	1000	1000	13	0.913	0.838	0.636
WaldVCF	1000	1000	13	0.351	0.189	0.057
WaldDiag,MM3	1000	1000	13	0.114	0.049	0.004
WaldDiag,RS2	1000	1000	13	0.116	0.055	0.005
Pearson,MM3	1000	1000	13	0.254	0.152	0.046
Pearson,RS2	1000	1000	13	0.254	0.159	0.050
<b>2F 10V</b>						
Wald	1000	1000	14	0.436	0.315	0.146
WaldVCF	1000	1000	14	0.235	0.140	0.036
WaldDiag,MM3	1000	1000	14	0.067	0.026	0.004
WaldDiag,RS2	1000	1000	14	0.067	0.028	0.005
Pearson,MM3	1000	1000	14	0.183	0.104	0.024
Pearson,RS2	1000	1000	14	0.183	0.108	0.032
<b>3F 15V</b>						
Wald	1000	1000	40	0.704	0.572	0.328
WaldVCF	1000	1000	40	0.309	0.165	0.040
WaldDiag,MM3	1000	1000	40	0.079	0.032	0.003
WaldDiag,RS2	1000	1000	40	0.079	0.034	0.005
Pearson,MM3	1000	1000	40	0.188	0.108	0.021
Pearson,RS2	1000	1000	40	0.189	0.113	0.023

Type I errors ( $n = 1000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.133	0.080	0.020
WaldVCF	1000	1000	1	0.118	0.064	0.011
WaldDiag,MM3	1000	1000	1	0.093	0.038	0.003
WaldDiag,RS2	1000	1000	1	0.084	0.038	0.003
Pearson,MM3	1000	1000	1	0.123	0.060	0.011
Pearson,RS2	1000	1000	1	0.116	0.059	0.011
<b>1F 8V</b>						
Wald	1000	1000	2	0.256	0.157	0.048
WaldVCF	1000	1000	2	0.185	0.100	0.020
WaldDiag,MM3	1000	1000	2	0.107	0.045	0.007
WaldDiag,RS2	1000	1000	2	0.106	0.045	0.008
Pearson,MM3	1000	1000	2	0.185	0.097	0.032
Pearson,RS2	1000	1000	2	0.185	0.099	0.035
<b>1F 15V</b>						
Wald	1000	1000	17	0.617	0.500	0.270
WaldVCF	1000	1000	17	0.324	0.212	0.065
WaldDiag,MM3	1000	1000	17	0.173	0.084	0.019
WaldDiag,RS2	1000	1000	17	0.173	0.091	0.020
Pearson,MM3	1000	1000	17	0.296	0.180	0.040
Pearson,RS2	1000	1000	17	0.300	0.182	0.047
<b>2F 10V</b>						
Wald	1000	1000	8	0.272	0.167	0.063
WaldVCF	1000	1000	8	0.188	0.110	0.032
WaldDiag,MM3	1000	1000	8	0.093	0.054	0.011
WaldDiag,RS2	1000	1000	8	0.094	0.054	0.013
Pearson,MM3	1000	1000	8	0.164	0.091	0.024
Pearson,RS2	1000	1000	8	0.164	0.096	0.028
<b>3F 15V</b>						
Wald	1000	1000	38	0.524	0.382	0.178
WaldVCF	1000	1000	38	0.316	0.201	0.065
WaldDiag,MM3	1000	1000	38	0.136	0.074	0.014
WaldDiag,RS2	1000	1000	38	0.138	0.076	0.017
Pearson,MM3	1000	1000	38	0.236	0.119	0.046
Pearson,RS2	1000	1000	38	0.238	0.123	0.049

Type I errors ( $n = 2000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.146	0.079	0.021
WaldVCF	1000	1000	1	0.140	0.074	0.018
WaldDiag,MM3	1000	1000	1	0.108	0.052	0.012
WaldDiag,RS2	1000	1000	1	0.104	0.046	0.012
Pearson,MM3	1000	1000	1	0.129	0.075	0.018
Pearson,RS2	1000	1000	1	0.127	0.074	0.018
<b>1F 8V</b>						
Wald	1000	1000	0	0.215	0.118	0.042
WaldVCF	1000	1000	0	0.179	0.089	0.027
WaldDiag,MM3	1000	1000	0	0.130	0.070	0.015
WaldDiag,RS2	1000	1000	0	0.130	0.073	0.015
Pearson,MM3	1000	1000	0	0.197	0.130	0.037
Pearson,RS2	1000	1000	0	0.196	0.130	0.039
<b>1F 15V</b>						
Wald	1000	1000	20	0.392	0.266	0.088
WaldVCF	1000	1000	20	0.263	0.154	0.033
WaldDiag,MM3	1000	1000	20	0.163	0.064	0.013
WaldDiag,RS2	1000	1000	20	0.164	0.072	0.015
Pearson,MM3	1000	1000	20	0.273	0.175	0.054
Pearson,RS2	1000	1000	20	0.273	0.175	0.063
<b>2F 10V</b>						
Wald	1000	1000	11	0.268	0.160	0.061
WaldVCF	1000	1000	11	0.216	0.122	0.049
WaldDiag,MM3	1000	1000	11	0.153	0.078	0.018
WaldDiag,RS2	1000	1000	11	0.153	0.080	0.024
Pearson,MM3	1000	1000	11	0.191	0.115	0.037
Pearson,RS2	1000	1000	11	0.191	0.123	0.042
<b>3F 15V</b>						
Wald	1000	1000	44	0.411	0.297	0.099
WaldVCF	1000	1000	44	0.330	0.198	0.057
WaldDiag,MM3	1000	1000	44	0.202	0.102	0.020
WaldDiag,RS2	1000	1000	44	0.202	0.109	0.025
Pearson,MM3	1000	1000	44	0.250	0.152	0.049
Pearson,RS2	1000	1000	44	0.253	0.160	0.053



Type I errors ( $n = 3000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.147	0.083	0.025
WaldVCF	1000	1000	1	0.144	0.076	0.022
WaldDiag,MM3	1000	1000	1	0.113	0.063	0.016
WaldDiag,RS2	1000	1000	1	0.108	0.060	0.016
Pearson,MM3	1000	1000	1	0.132	0.075	0.017
Pearson,RS2	1000	1000	1	0.125	0.074	0.017
<b>1F 8V</b>						
Wald	1000	1000	4	0.183	0.109	0.033
WaldVCF	1000	1000	4	0.168	0.092	0.030
WaldDiag,MM3	1000	1000	4	0.127	0.059	0.012
WaldDiag,RS2	1000	1000	4	0.127	0.062	0.013
Pearson,MM3	1000	1000	4	0.180	0.106	0.035
Pearson,RS2	1000	1000	4	0.180	0.109	0.042
<b>1F 15V</b>						
Wald	1000	1000	23	0.353	0.213	0.083
WaldVCF	1000	1000	23	0.258	0.153	0.047
WaldDiag,MM3	1000	1000	23	0.187	0.102	0.026
WaldDiag,RS2	1000	1000	23	0.188	0.102	0.027
Pearson,MM3	1000	1000	23	0.286	0.182	0.050
Pearson,RS2	1000	1000	23	0.286	0.184	0.057
<b>2F 10V</b>						
Wald	1000	1000	15	0.234	0.131	0.047
WaldVCF	1000	1000	15	0.204	0.109	0.037
WaldDiag,MM3	1000	1000	15	0.136	0.076	0.014
WaldDiag,RS2	1000	1000	15	0.136	0.077	0.017
Pearson,MM3	1000	1000	15	0.193	0.101	0.024
Pearson,RS2	1000	1000	15	0.193	0.105	0.028
<b>3F 15V</b>						
Wald	1000	1000	53	0.381	0.275	0.087
WaldVCF	1000	1000	53	0.322	0.200	0.054
WaldDiag,MM3	1000	1000	53	0.198	0.109	0.034
WaldDiag,RS2	1000	1000	53	0.200	0.111	0.036
Pearson,MM3	1000	1000	53	0.275	0.175	0.054
Pearson,RS2	1000	1000	53	0.275	0.179	0.058

Type I errors ( $n = 5000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.144	0.078	0.014
WaldVCF	1000	1000	1	0.141	0.075	0.014
WaldDiag,MM3	1000	1000	1	0.124	0.066	0.013
WaldDiag,RS2	1000	1000	1	0.116	0.065	0.013
Pearson,MM3	1000	1000	1	0.149	0.074	0.014
Pearson,RS2	1000	1000	1	0.142	0.071	0.014
<b>1F 8V</b>						
Wald	1000	1000	6	0.177	0.099	0.030
WaldVCF	1000	1000	6	0.165	0.089	0.026
WaldDiag,MM3	1000	1000	6	0.127	0.064	0.013
WaldDiag,RS2	1000	1000	6	0.127	0.065	0.014
Pearson,MM3	1000	1000	6	0.184	0.119	0.034
Pearson,RS2	1000	1000	6	0.183	0.121	0.035
<b>1F 15V</b>						
Wald	1000	1000	26	0.329	0.218	0.078
WaldVCF	1000	1000	26	0.280	0.175	0.056
WaldDiag,MM3	1000	1000	26	0.207	0.110	0.036
WaldDiag,RS2	1000	1000	26	0.208	0.115	0.039
Pearson,MM3	1000	1000	26	0.306	0.210	0.067
Pearson,RS2	1000	1000	26	0.308	0.215	0.071
<b>2F 10V</b>						
Wald	1000	1000	20	0.203	0.120	0.034
WaldVCF	1000	1000	20	0.190	0.103	0.030
WaldDiag,MM3	1000	1000	20	0.145	0.080	0.018
WaldDiag,RS2	1000	1000	20	0.146	0.082	0.020
Pearson,MM3	1000	1000	20	0.195	0.107	0.023
Pearson,RS2	1000	1000	20	0.195	0.113	0.031
<b>3F 15V</b>						
Wald	1000	1000	62	0.365	0.247	0.088
WaldVCF	1000	1000	62	0.325	0.210	0.068
WaldDiag,MM3	1000	1000	62	0.228	0.131	0.046
WaldDiag,RS2	1000	1000	62	0.230	0.138	0.050
Pearson,MM3	1000	1000	62	0.294	0.183	0.052
Pearson,RS2	1000	1000	62	0.297	0.187	0.057

Type I errors ( $n = 10000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	4	0.127	0.069	0.014
WaldVCF	1000	1000	4	0.126	0.066	0.013
WaldDiag,MM3	1000	1000	4	0.119	0.061	0.014
WaldDiag,RS2	1000	1000	4	0.114	0.058	0.014
Pearson,MM3	1000	1000	4	0.145	0.073	0.016
Pearson,RS2	1000	1000	4	0.143	0.071	0.016
<b>1F 8V</b>						
Wald	1000	1000	5	0.186	0.102	0.028
WaldVCF	1000	1000	5	0.180	0.095	0.024
WaldDiag,MM3	1000	1000	5	0.159	0.073	0.016
WaldDiag,RS2	1000	1000	5	0.159	0.074	0.018
Pearson,MM3	1000	1000	5	0.189	0.106	0.031
Pearson,RS2	1000	1000	5	0.187	0.108	0.037
<b>1F 15V</b>						
Wald	1000	1000	38	0.273	0.181	0.058
WaldVCF	1000	1000	38	0.248	0.158	0.052
WaldDiag,MM3	1000	1000	38	0.200	0.110	0.029
WaldDiag,RS2	1000	1000	38	0.200	0.113	0.030
Pearson,MM3	1000	1000	38	0.287	0.187	0.056
Pearson,RS2	1000	1000	38	0.289	0.193	0.063
<b>2F 10V</b>						
Wald	1000	1000	24	0.205	0.135	0.037
WaldVCF	1000	1000	24	0.192	0.123	0.030
WaldDiag,MM3	1000	1000	24	0.171	0.089	0.027
WaldDiag,RS2	1000	1000	24	0.171	0.098	0.029
Pearson,MM3	1000	1000	24	0.196	0.105	0.026
Pearson,RS2	1000	1000	24	0.196	0.112	0.033
<b>3F 15V</b>						
Wald	1000	1000	99	0.323	0.214	0.067
WaldVCF	1000	1000	99	0.294	0.191	0.056
WaldDiag,MM3	1000	1000	99	0.228	0.126	0.025
WaldDiag,RS2	1000	1000	99	0.228	0.132	0.035
Pearson,MM3	1000	1000	99	0.251	0.159	0.047
Pearson,RS2	1000	1000	99	0.254	0.164	0.055

Power ( $n = 500$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.409	0.289	0.121
WaldVCF	1000	1000	1	0.365	0.230	0.084
WaldDiag,MM3	1000	1000	1	0.183	0.084	0.010
WaldDiag,RS2	1000	1000	1	0.181	0.087	0.016
Pearson,MM3	1000	1000	1	0.384	0.257	0.097
Pearson,RS2	1000	1000	1	0.382	0.260	0.112
<b>1F 8V</b>						
Wald	1000	1000	3	0.795	0.711	0.516
WaldVCF	1000	1000	3	0.551	0.414	0.172
WaldDiag,MM3	1000	1000	3	0.378	0.239	0.072
WaldDiag,RS2	1000	1000	3	0.379	0.250	0.078
Pearson,MM3	1000	1000	3	0.441	0.308	0.119
Pearson,RS2	1000	1000	3	0.445	0.321	0.133
<b>1F 15V</b>						
Wald	1000	1000	14	0.996	0.991	0.964
WaldVCF	1000	1000	14	0.608	0.437	0.180
WaldDiag,MM3	1000	1000	14	0.400	0.245	0.061
WaldDiag,RS2	1000	1000	14	0.406	0.255	0.076
Pearson,MM3	1000	1000	14	0.671	0.533	0.270
Pearson,RS2	1000	1000	14	0.675	0.541	0.295
<b>2F 10V</b>						
Wald	1000	1000	11	0.560	0.437	0.238
WaldVCF	1000	1000	11	0.315	0.195	0.046
WaldDiag,MM3	1000	1000	11	0.162	0.071	0.015
WaldDiag,RS2	1000	1000	11	0.164	0.079	0.020
Pearson,MM3	1000	1000	11	0.316	0.195	0.071
Pearson,RS2	1000	1000	11	0.317	0.208	0.086
<b>3F 15V</b>						
Wald	1000	1000	20	0.859	0.753	0.505
WaldVCF	1000	1000	20	0.404	0.261	0.074
WaldDiag,MM3	1000	1000	20	0.208	0.095	0.012
WaldDiag,RS2	1000	1000	20	0.211	0.100	0.014
Pearson,MM3	1000	1000	20	0.430	0.286	0.118
Pearson,RS2	1000	1000	20	0.437	0.292	0.135

Power ( $n = 1000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	0	0.540	0.434	0.237
WaldVCF	1000	1000	0	0.525	0.412	0.207
WaldDiag,MM3	1000	1000	0	0.371	0.244	0.065
WaldDiag,RS2	1000	1000	0	0.369	0.251	0.077
Pearson,MM3	1000	1000	0	0.582	0.470	0.260
Pearson,RS2	1000	1000	0	0.582	0.478	0.275
<b>1F 8V</b>						
Wald	1000	1000	0	0.939	0.884	0.719
WaldVCF	1000	1000	0	0.866	0.765	0.521
WaldDiag,MM3	1000	1000	0	0.724	0.592	0.303
WaldDiag,RS2	1000	1000	0	0.725	0.605	0.332
Pearson,MM3	1000	1000	0	0.731	0.591	0.326
Pearson,RS2	1000	1000	0	0.732	0.600	0.354
<b>1F 15V</b>						
Wald	1000	1000	9	0.965	0.930	0.809
WaldVCF	1000	1000	9	0.777	0.671	0.397
WaldDiag,MM3	1000	1000	9	0.685	0.531	0.257
WaldDiag,RS2	1000	1000	9	0.688	0.546	0.287
Pearson,MM3	1000	1000	9	0.911	0.853	0.664
Pearson,RS2	1000	1000	9	0.913	0.857	0.685
<b>2F 10V</b>						
Wald	1000	1000	9	0.500	0.375	0.181
WaldVCF	1000	1000	9	0.358	0.253	0.085
WaldDiag,MM3	1000	1000	9	0.305	0.183	0.053
WaldDiag,RS2	1000	1000	9	0.306	0.192	0.062
Pearson,MM3	1000	1000	9	0.469	0.339	0.148
Pearson,RS2	1000	1000	9	0.470	0.347	0.164
<b>3F 15V</b>						
Wald	1000	1000	35	0.749	0.635	0.381
WaldVCF	1000	1000	35	0.554	0.409	0.173
WaldDiag,MM3	1000	1000	35	0.438	0.292	0.099
WaldDiag,RS2	1000	1000	35	0.441	0.298	0.111
Pearson,MM3	1000	1000	35	0.650	0.523	0.302
Pearson,RS2	1000	1000	35	0.653	0.535	0.326

Power ( $n = 2000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	0	0.827	0.729	0.536
WaldVCF	1000	1000	0	0.820	0.722	0.518
WaldDiag,MM3	1000	1000	0	0.677	0.540	0.291
WaldDiag,RS2	1000	1000	0	0.673	0.546	0.311
Pearson,MM3	1000	1000	0	0.869	0.783	0.624
Pearson,RS2	1000	1000	0	0.868	0.783	0.642
<b>1F 8V</b>						
Wald	1000	1000	0	0.999	0.994	0.973
WaldVCF	1000	1000	0	0.995	0.993	0.949
WaldDiag,MM3	1000	1000	0	0.982	0.956	0.819
WaldDiag,RS2	1000	1000	0	0.983	0.956	0.835
Pearson,MM3	1000	1000	0	0.974	0.930	0.754
Pearson,RS2	1000	1000	0	0.975	0.935	0.774
<b>1F 15V</b>						
Wald	1000	1000	13	0.987	0.972	0.891
WaldVCF	1000	1000	13	0.964	0.924	0.769
WaldDiag,MM3	1000	1000	13	0.938	0.866	0.684
WaldDiag,RS2	1000	1000	13	0.940	0.873	0.705
Pearson,MM3	1000	1000	13	0.996	0.992	0.956
Pearson,RS2	1000	1000	13	0.996	0.992	0.961
<b>2F 10V</b>						
Wald	1000	1000	7	0.623	0.497	0.262
WaldVCF	1000	1000	7	0.550	0.423	0.183
WaldDiag,MM3	1000	1000	7	0.574	0.435	0.190
WaldDiag,RS2	1000	1000	7	0.574	0.445	0.213
Pearson,MM3	1000	1000	7	0.698	0.590	0.359
Pearson,RS2	1000	1000	7	0.700	0.601	0.399
<b>3F 15V</b>						
Wald	1000	1000	32	0.855	0.738	0.505
WaldVCF	1000	1000	32	0.764	0.638	0.376
WaldDiag,MM3	1000	1000	32	0.785	0.674	0.421
WaldDiag,RS2	1000	1000	32	0.788	0.680	0.451
Pearson,MM3	1000	1000	32	0.928	0.859	0.697
Pearson,RS2	1000	1000	32	0.928	0.867	0.718

Power ( $n = 3000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	0	0.959	0.917	0.770
WaldVCF	1000	1000	0	0.958	0.913	0.763
WaldDiag,MM3	1000	1000	0	0.892	0.799	0.538
WaldDiag,RS2	1000	1000	0	0.892	0.802	0.554
Pearson,MM3	1000	1000	0	0.975	0.947	0.838
Pearson,RS2	1000	1000	0	0.975	0.948	0.848
<b>1F 8V</b>						
Wald	1000	1000	1	1.000	1.000	0.999
WaldVCF	1000	1000	1	1.000	1.000	0.999
WaldDiag,MM3	1000	1000	1	1.000	0.997	0.985
WaldDiag,RS2	1000	1000	1	1.000	0.997	0.989
Pearson,MM3	1000	1000	1	1.000	0.994	0.969
Pearson,RS2	1000	1000	1	1.000	0.995	0.971
<b>1F 15V</b>						
Wald	1000	1000	14	0.997	0.990	0.965
WaldVCF	1000	1000	14	0.991	0.983	0.941
WaldDiag,MM3	1000	1000	14	0.990	0.974	0.915
WaldDiag,RS2	1000	1000	14	0.990	0.974	0.927
Pearson,MM3	1000	1000	14	1.000	1.000	0.998
Pearson,RS2	1000	1000	14	1.000	1.000	0.998
<b>2F 10V</b>						
Wald	1000	1000	11	0.762	0.642	0.387
WaldVCF	1000	1000	11	0.708	0.584	0.318
WaldDiag,MM3	1000	1000	11	0.773	0.646	0.395
WaldDiag,RS2	1000	1000	11	0.774	0.660	0.426
Pearson,MM3	1000	1000	11	0.866	0.785	0.595
Pearson,RS2	1000	1000	11	0.867	0.795	0.635
<b>3F 15V</b>						
Wald	1000	1000	39	0.935	0.868	0.691
WaldVCF	1000	1000	39	0.894	0.815	0.608
WaldDiag,MM3	1000	1000	39	0.941	0.884	0.712
WaldDiag,RS2	1000	1000	39	0.941	0.894	0.729
Pearson,MM3	1000	1000	39	0.985	0.968	0.896
Pearson,RS2	1000	1000	39	0.986	0.968	0.907

Power ( $n = 5000$ )

					Rejection rate		
1F 5V							
1F 8V							
1F 15V							
2F 10V							
3F 15V							
	Name	No. repl.	Converged	Rank def.	10%	5%	1%

Power ( $n = 10000$ )

					Rejection rate		
<hr/>							
1F 5V							
1F 8V							
1F 15V							
2F 10V							
3F 15V							
	Name	No. repl.	Converged	Rank def.	10%	5%	1%
<hr/>							



## Cluster sampling

Type I errors ( $n = 500$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	6	0.149	0.081	0.025
WaldVCF	1000	1000	6	0.106	0.051	0.009
WaldDiag,MM3	1000	1000	6	0.036	0.012	0.002
WaldDiag,RS2	1000	1000	6	0.033	0.012	0.002
Pearson,MM3	1000	1000	6	0.084	0.036	0.007
Pearson,RS2	1000	1000	6	0.080	0.034	0.007
<b>1F 8V</b>						
Wald	1000	1000	6	0.332	0.233	0.114
WaldVCF	1000	1000	6	0.124	0.060	0.011
WaldDiag,MM3	1000	1000	6	0.056	0.021	0.002
WaldDiag,RS2	1000	1000	6	0.055	0.024	0.003
Pearson,MM3	1000	1000	6	0.088	0.040	0.007
Pearson,RS2	1000	1000	6	0.087	0.041	0.009
<b>1F 15V</b>						
Wald	1000	1000	79	0.847	0.786	0.610
WaldVCF	1000	1000	79	0.145	0.067	0.011
WaldDiag,MM3	1000	1000	79	0.068	0.027	0.003
WaldDiag,RS2	1000	1000	79	0.069	0.030	0.004
Pearson,MM3	1000	1000	79	0.091	0.046	0.008
Pearson,RS2	1000	1000	79	0.092	0.047	0.009
<b>2F 10V</b>						
Wald	1000	1000	21	0.301	0.202	0.076
WaldVCF	1000	1000	21	0.125	0.069	0.010
WaldDiag,MM3	1000	1000	21	0.037	0.015	0.000
WaldDiag,RS2	1000	1000	21	0.037	0.017	0.001
Pearson,MM3	1000	1000	21	0.074	0.039	0.009
Pearson,RS2	1000	1000	21	0.073	0.042	0.010
<b>3F 15V</b>						
Wald	999	999	78	0.518	0.387	0.162
WaldVCF	999	999	78	0.124	0.060	0.010
WaldDiag,MM3	999	999	78	0.048	0.014	0.000
WaldDiag,RS2	999	999	78	0.048	0.015	0.000
Pearson,MM3	999	999	78	0.086	0.046	0.009
Pearson,RS2	999	999	78	0.086	0.051	0.011

Type I errors ( $n = 1000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	2	0.139	0.075	0.025
WaldVCF	1000	1000	2	0.122	0.066	0.019
WaldDiag,MM3	1000	1000	2	0.088	0.042	0.006
WaldDiag,RS2	1000	1000	2	0.086	0.042	0.007
Pearson,MM3	1000	1000	2	0.115	0.067	0.013
Pearson,RS2	1000	1000	2	0.110	0.067	0.016
<b>1F 8V</b>						
Wald	1000	1000	3	0.206	0.128	0.038
WaldVCF	1000	1000	3	0.122	0.063	0.012
WaldDiag,MM3	1000	1000	3	0.092	0.038	0.006
WaldDiag,RS2	1000	1000	3	0.092	0.041	0.008
Pearson,MM3	1000	1000	3	0.086	0.049	0.009
Pearson,RS2	1000	1000	3	0.085	0.050	0.011
<b>1F 15V</b>						
Wald	1000	1000	15	0.499	0.373	0.183
WaldVCF	1000	1000	15	0.156	0.080	0.014
WaldDiag,MM3	1000	1000	15	0.086	0.032	0.000
WaldDiag,RS2	1000	1000	15	0.087	0.038	0.003
Pearson,MM3	1000	1000	15	0.093	0.043	0.007
Pearson,RS2	1000	1000	15	0.094	0.044	0.007
<b>2F 10V</b>						
Wald	1000	1000	13	0.213	0.125	0.043
WaldVCF	1000	1000	13	0.144	0.074	0.012
WaldDiag,MM3	1000	1000	13	0.068	0.024	0.004
WaldDiag,RS2	1000	1000	13	0.068	0.025	0.006
Pearson,MM3	1000	1000	13	0.105	0.046	0.012
Pearson,RS2	1000	1000	13	0.105	0.047	0.018
<b>3F 15V</b>						
Wald	1000	1000	44	0.315	0.202	0.063
WaldVCF	1000	1000	44	0.139	0.077	0.013
WaldDiag,MM3	1000	1000	44	0.057	0.025	0.005
WaldDiag,RS2	1000	1000	44	0.057	0.027	0.005
Pearson,MM3	1000	1000	44	0.090	0.043	0.005
Pearson,RS2	1000	1000	44	0.090	0.044	0.008

Type I errors ( $n = 2000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	2	0.123	0.069	0.020
WaldVCF	1000	1000	2	0.108	0.064	0.017
WaldDiag,MM3	1000	1000	2	0.099	0.052	0.009
WaldDiag,RS2	1000	1000	2	0.098	0.051	0.009
Pearson,MM3	1000	1000	2	0.099	0.047	0.008
Pearson,RS2	1000	1000	2	0.095	0.046	0.008
<b>1F 8V</b>						
Wald	1000	1000	4	0.153	0.086	0.019
WaldVCF	1000	1000	4	0.116	0.060	0.009
WaldDiag,MM3	1000	1000	4	0.102	0.051	0.007
WaldDiag,RS2	1000	1000	4	0.102	0.054	0.008
Pearson,MM3	1000	1000	4	0.096	0.048	0.008
Pearson,RS2	1000	1000	4	0.095	0.048	0.010
<b>1F 15V</b>						
Wald	1000	1000	24	0.253	0.166	0.064
WaldVCF	1000	1000	24	0.134	0.077	0.024
WaldDiag,MM3	1000	1000	24	0.100	0.049	0.008
WaldDiag,RS2	1000	1000	24	0.100	0.052	0.009
Pearson,MM3	1000	1000	24	0.099	0.050	0.011
Pearson,RS2	1000	1000	24	0.100	0.051	0.012
<b>2F 10V</b>						
Wald	1000	1000	21	0.153	0.095	0.023
WaldVCF	1000	1000	21	0.121	0.066	0.017
WaldDiag,MM3	1000	1000	21	0.099	0.045	0.007
WaldDiag,RS2	1000	1000	21	0.099	0.048	0.007
Pearson,MM3	1000	1000	21	0.116	0.059	0.011
Pearson,RS2	1000	1000	21	0.116	0.060	0.016
<b>3F 15V</b>						
Wald	1000	1000	32	0.193	0.115	0.030
WaldVCF	1000	1000	32	0.130	0.057	0.012
WaldDiag,MM3	1000	1000	32	0.085	0.039	0.010
WaldDiag,RS2	1000	1000	32	0.086	0.040	0.012
Pearson,MM3	1000	1000	32	0.100	0.052	0.010
Pearson,RS2	1000	1000	32	0.102	0.056	0.010

Type I errors ( $n = 3000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	4	0.108	0.054	0.013
WaldVCF	1000	1000	4	0.102	0.049	0.012
WaldDiag,MM3	1000	1000	4	0.086	0.033	0.008
WaldDiag,RS2	1000	1000	4	0.083	0.032	0.008
Pearson,MM3	1000	1000	4	0.094	0.047	0.007
Pearson,RS2	1000	1000	4	0.086	0.045	0.007
<b>1F 8V</b>						
Wald	1000	1000	7	0.128	0.071	0.013
WaldVCF	1000	1000	7	0.109	0.057	0.006
WaldDiag,MM3	1000	1000	7	0.096	0.048	0.009
WaldDiag,RS2	1000	1000	7	0.096	0.048	0.011
Pearson,MM3	1000	1000	7	0.093	0.033	0.004
Pearson,RS2	1000	1000	7	0.091	0.033	0.005
<b>1F 15V</b>						
Wald	1000	1000	28	0.225	0.145	0.037
WaldVCF	1000	1000	28	0.154	0.076	0.016
WaldDiag,MM3	1000	1000	28	0.132	0.057	0.015
WaldDiag,RS2	1000	1000	28	0.133	0.059	0.016
Pearson,MM3	1000	1000	28	0.105	0.056	0.009
Pearson,RS2	1000	1000	28	0.106	0.057	0.011
<b>2F 10V</b>						
Wald	1000	1000	18	0.149	0.083	0.020
WaldVCF	1000	1000	18	0.129	0.067	0.015
WaldDiag,MM3	1000	1000	18	0.088	0.043	0.011
WaldDiag,RS2	1000	1000	18	0.088	0.045	0.013
Pearson,MM3	1000	1000	18	0.109	0.052	0.010
Pearson,RS2	1000	1000	18	0.109	0.053	0.011
<b>3F 15V</b>						
Wald	1000	1000	47	0.209	0.133	0.035
WaldVCF	1000	1000	47	0.160	0.091	0.024
WaldDiag,MM3	1000	1000	47	0.113	0.068	0.021
WaldDiag,RS2	1000	1000	47	0.113	0.069	0.023
Pearson,MM3	1000	1000	47	0.137	0.068	0.013
Pearson,RS2	1000	1000	47	0.138	0.070	0.020

Type I errors ( $n = 5000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.116	0.058	0.015
WaldVCF	1000	1000	1	0.112	0.057	0.014
WaldDiag,MM3	1000	1000	1	0.110	0.051	0.014
WaldDiag,RS2	1000	1000	1	0.105	0.048	0.014
Pearson,MM3	1000	1000	1	0.093	0.053	0.004
Pearson,RS2	1000	1000	1	0.090	0.050	0.004
<b>1F 8V</b>						
Wald	1000	1000	6	0.132	0.056	0.008
WaldVCF	1000	1000	6	0.123	0.054	0.007
WaldDiag,MM3	1000	1000	6	0.106	0.042	0.010
WaldDiag,RS2	1000	1000	6	0.103	0.043	0.011
Pearson,MM3	1000	1000	6	0.091	0.046	0.008
Pearson,RS2	1000	1000	6	0.091	0.046	0.011
<b>1F 15V</b>						
Wald	1000	1000	27	0.152	0.091	0.027
WaldVCF	1000	1000	27	0.119	0.070	0.017
WaldDiag,MM3	1000	1000	27	0.110	0.058	0.011
WaldDiag,RS2	1000	1000	27	0.110	0.060	0.011
Pearson,MM3	1000	1000	27	0.082	0.047	0.009
Pearson,RS2	1000	1000	27	0.082	0.049	0.012
<b>2F 10V</b>						
Wald	1000	1000	26	0.119	0.071	0.015
WaldVCF	1000	1000	26	0.111	0.060	0.011
WaldDiag,MM3	1000	1000	26	0.097	0.052	0.011
WaldDiag,RS2	1000	1000	26	0.097	0.052	0.012
Pearson,MM3	1000	1000	26	0.102	0.049	0.013
Pearson,RS2	1000	1000	26	0.102	0.054	0.015
<b>3F 15V</b>						
Wald	1000	1000	79	0.133	0.078	0.020
WaldVCF	1000	1000	79	0.108	0.064	0.016
WaldDiag,MM3	1000	1000	79	0.089	0.053	0.015
WaldDiag,RS2	1000	1000	79	0.089	0.054	0.016
Pearson,MM3	1000	1000	79	0.091	0.052	0.011
Pearson,RS2	1000	1000	79	0.091	0.054	0.013

Type I errors ( $n = 10000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	3	0.112	0.049	0.009
WaldVCF	1000	1000	3	0.112	0.046	0.008
WaldDiag,MM3	1000	1000	3	0.110	0.051	0.008
WaldDiag,RS2	1000	1000	3	0.100	0.050	0.008
Pearson,MM3	1000	1000	3	0.110	0.042	0.007
Pearson,RS2	1000	1000	3	0.104	0.041	0.007
<b>1F 8V</b>						
Wald	1000	1000	6	0.113	0.066	0.011
WaldVCF	1000	1000	6	0.108	0.062	0.011
WaldDiag,MM3	1000	1000	6	0.111	0.047	0.012
WaldDiag,RS2	1000	1000	6	0.111	0.051	0.012
Pearson,MM3	1000	1000	6	0.116	0.054	0.014
Pearson,RS2	1000	1000	6	0.115	0.056	0.018
<b>1F 15V</b>						
Wald	1000	1000	36	0.136	0.073	0.011
WaldVCF	1000	1000	36	0.106	0.062	0.010
WaldDiag,MM3	1000	1000	36	0.122	0.064	0.015
WaldDiag,RS2	1000	1000	36	0.122	0.065	0.016
Pearson,MM3	1000	1000	36	0.078	0.044	0.008
Pearson,RS2	1000	1000	36	0.078	0.046	0.011
<b>2F 10V</b>						
Wald	1000	1000	24	0.122	0.060	0.011
WaldVCF	1000	1000	24	0.115	0.049	0.010
WaldDiag,MM3	1000	1000	24	0.104	0.042	0.009
WaldDiag,RS2	1000	1000	24	0.104	0.045	0.009
Pearson,MM3	1000	1000	24	0.116	0.060	0.010
Pearson,RS2	1000	1000	24	0.116	0.064	0.011
<b>3F 15V</b>						
Wald	1000	1000	76	0.181	0.092	0.028
WaldVCF	1000	1000	76	0.152	0.074	0.025
WaldDiag,MM3	1000	1000	76	0.137	0.068	0.013
WaldDiag,RS2	1000	1000	76	0.137	0.073	0.016
Pearson,MM3	1000	1000	76	0.135	0.081	0.016
Pearson,RS2	1000	1000	76	0.135	0.083	0.018

Power ( $n = 500$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.351	0.241	0.096
WaldVCF	1000	1000	1	0.310	0.187	0.059
WaldDiag,MM3	1000	1000	1	0.125	0.054	0.004
WaldDiag,RS2	1000	1000	1	0.124	0.057	0.006
Pearson,MM3	1000	1000	1	0.332	0.199	0.074
Pearson,RS2	1000	1000	1	0.330	0.204	0.079
<b>1F 8V</b>						
Wald	1000	1000	2	0.750	0.683	0.507
WaldVCF	1000	1000	2	0.484	0.345	0.111
WaldDiag,MM3	1000	1000	2	0.319	0.178	0.036
WaldDiag,RS2	1000	1000	2	0.320	0.187	0.046
Pearson,MM3	1000	1000	2	0.334	0.217	0.049
Pearson,RS2	1000	1000	2	0.336	0.223	0.064
<b>1F 15V</b>						
Wald	1000	1000	41	0.976	0.954	0.871
WaldVCF	1000	1000	41	0.285	0.168	0.044
WaldDiag,MM3	1000	1000	41	0.207	0.111	0.020
WaldDiag,RS2	1000	1000	41	0.210	0.119	0.024
Pearson,MM3	1000	1000	41	0.462	0.330	0.147
Pearson,RS2	1000	1000	41	0.465	0.341	0.161
<b>2F 10V</b>						
Wald	999	998	19	0.413	0.306	0.143
WaldVCF	999	998	19	0.185	0.097	0.020
WaldDiag,MM3	999	998	19	0.090	0.040	0.003
WaldDiag,RS2	999	998	19	0.091	0.046	0.003
Pearson,MM3	999	998	19	0.206	0.110	0.026
Pearson,RS2	999	998	19	0.207	0.120	0.032
<b>3F 15V</b>						
Wald	1000	999	58	0.683	0.543	0.296
WaldVCF	1000	999	58	0.219	0.127	0.022
WaldDiag,MM3	1000	999	58	0.115	0.047	0.005
WaldDiag,RS2	1000	999	58	0.116	0.051	0.006
Pearson,MM3	1000	999	58	0.271	0.173	0.058
Pearson,RS2	1000	999	58	0.274	0.181	0.065

Power ( $n = 1000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	0	0.549	0.417	0.199
WaldVCF	1000	1000	0	0.534	0.391	0.170
WaldDiag,MM3	1000	1000	0	0.349	0.212	0.058
WaldDiag,RS2	1000	1000	0	0.348	0.212	0.065
Pearson,MM3	1000	1000	0	0.602	0.468	0.242
Pearson,RS2	1000	1000	0	0.600	0.473	0.258
<b>1F 8V</b>						
Wald	1000	1000	2	0.906	0.844	0.681
WaldVCF	1000	1000	2	0.815	0.697	0.448
WaldDiag,MM3	1000	1000	2	0.673	0.522	0.247
WaldDiag,RS2	1000	1000	2	0.674	0.527	0.274
Pearson,MM3	1000	1000	2	0.642	0.484	0.233
Pearson,RS2	1000	1000	2	0.645	0.493	0.260
<b>1F 15V</b>						
Wald	1000	1000	11	0.855	0.779	0.569
WaldVCF	1000	1000	11	0.520	0.390	0.177
WaldDiag,MM3	1000	1000	11	0.470	0.325	0.117
WaldDiag,RS2	1000	1000	11	0.472	0.335	0.134
Pearson,MM3	1000	1000	11	0.786	0.693	0.468
Pearson,RS2	1000	1000	11	0.788	0.706	0.485
<b>2F 10V</b>						
Wald	1000	1000	12	0.402	0.270	0.104
WaldVCF	1000	1000	12	0.265	0.153	0.040
WaldDiag,MM3	1000	1000	12	0.239	0.140	0.027
WaldDiag,RS2	1000	1000	12	0.246	0.149	0.034
Pearson,MM3	1000	1000	12	0.364	0.260	0.103
Pearson,RS2	1000	1000	12	0.365	0.265	0.127
<b>3F 15V</b>						
Wald	1000	1000	21	0.568	0.417	0.197
WaldVCF	1000	1000	21	0.338	0.205	0.062
WaldDiag,MM3	1000	1000	21	0.300	0.175	0.049
WaldDiag,RS2	1000	1000	21	0.305	0.188	0.057
Pearson,MM3	1000	1000	21	0.505	0.372	0.176
Pearson,RS2	1000	1000	21	0.509	0.385	0.195



Power ( $n = 2000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	2	0.833	0.748	0.540
WaldVCF	1000	1000	2	0.828	0.742	0.531
WaldDiag,MM3	1000	1000	2	0.693	0.571	0.295
WaldDiag,RS2	1000	1000	2	0.693	0.572	0.317
Pearson,MM3	1000	1000	2	0.885	0.810	0.638
Pearson,RS2	1000	1000	2	0.885	0.813	0.647
<b>1F 8V</b>						
Wald	1000	1000	2	0.997	0.995	0.969
WaldVCF	1000	1000	2	0.994	0.989	0.935
WaldDiag,MM3	1000	1000	2	0.982	0.951	0.788
WaldDiag,RS2	1000	1000	2	0.982	0.954	0.814
Pearson,MM3	1000	1000	2	0.957	0.910	0.723
Pearson,RS2	1000	1000	2	0.957	0.916	0.745
<b>1F 15V</b>						
Wald	1000	1000	8	0.942	0.903	0.755
WaldVCF	1000	1000	8	0.880	0.798	0.560
WaldDiag,MM3	1000	1000	8	0.847	0.749	0.499
WaldDiag,RS2	1000	1000	8	0.848	0.759	0.524
Pearson,MM3	1000	1000	8	0.985	0.970	0.923
Pearson,RS2	1000	1000	8	0.985	0.970	0.930
<b>2F 10V</b>						
Wald	1000	1000	6	0.548	0.420	0.211
WaldVCF	1000	1000	6	0.474	0.339	0.155
WaldDiag,MM3	1000	1000	6	0.506	0.380	0.161
WaldDiag,RS2	1000	1000	6	0.507	0.388	0.190
Pearson,MM3	1000	1000	6	0.694	0.555	0.334
Pearson,RS2	1000	1000	6	0.695	0.574	0.365
<b>3F 15V</b>						
Wald	1000	1000	27	0.730	0.601	0.334
WaldVCF	1000	1000	27	0.610	0.467	0.215
WaldDiag,MM3	1000	1000	27	0.696	0.575	0.311
WaldDiag,RS2	1000	1000	27	0.702	0.583	0.346
Pearson,MM3	1000	1000	27	0.870	0.794	0.586
Pearson,RS2	1000	1000	27	0.871	0.800	0.610

Power ( $n = 3000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.958	0.925	0.771
WaldVCF	1000	1000	1	0.958	0.922	0.761
WaldDiag,MM3	1000	1000	1	0.893	0.805	0.543
WaldDiag,RS2	1000	1000	1	0.893	0.807	0.562
Pearson,MM3	1000	1000	1	0.976	0.945	0.853
Pearson,RS2	1000	1000	1	0.976	0.947	0.863
<b>1F 8V</b>						
Wald	1000	1000	5	1.000	1.000	0.999
WaldVCF	1000	1000	5	1.000	0.999	0.999
WaldDiag,MM3	1000	1000	5	0.999	0.999	0.988
WaldDiag,RS2	1000	1000	5	0.999	0.999	0.989
Pearson,MM3	1000	1000	5	0.999	0.993	0.954
Pearson,RS2	1000	1000	5	0.999	0.994	0.968
<b>1F 15V</b>						
Wald	1000	1000	13	0.996	0.984	0.935
WaldVCF	1000	1000	13	0.990	0.970	0.876
WaldDiag,MM3	1000	1000	13	0.987	0.963	0.863
WaldDiag,RS2	1000	1000	13	0.987	0.966	0.873
Pearson,MM3	1000	1000	13	0.999	0.999	0.998
Pearson,RS2	1000	1000	13	0.999	0.999	0.998
<b>2F 10V</b>						
Wald	1000	1000	10	0.649	0.525	0.301
WaldVCF	1000	1000	10	0.593	0.463	0.242
WaldDiag,MM3	1000	1000	10	0.673	0.559	0.315
WaldDiag,RS2	1000	1000	10	0.675	0.569	0.346
Pearson,MM3	1000	1000	10	0.801	0.723	0.528
Pearson,RS2	1000	1000	10	0.802	0.733	0.552
<b>3F 15V</b>						
Wald	1000	1000	40	0.865	0.791	0.563
WaldVCF	1000	1000	40	0.822	0.719	0.468
WaldDiag,MM3	1000	1000	40	0.889	0.818	0.622
WaldDiag,RS2	1000	1000	40	0.891	0.826	0.649
Pearson,MM3	1000	1000	40	0.961	0.936	0.865
Pearson,RS2	1000	1000	40	0.961	0.939	0.881

Power ( $n = 5000$ )

					Rejection rate		
<hr/>							
1F 5V							
1F 8V							
1F 15V							
2F 10V							
3F 15V							
	Name	No. repl.	Converged	Rank def.	10%	5%	1%
<hr/>							

Power ( $n = 10000$ )

					Rejection rate		
<hr/>							
1F 5V							
1F 8V							
1F 15V							
2F 10V							
3F 15V							
	Name	No. repl.	Converged	Rank def.	10%	5%	1%
<hr/>							

## Strat-clust sampling

Type I errors ( $n = 500$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	5	0.159	0.097	0.029
WaldVCF	1000	1000	5	0.122	0.060	0.014
WaldDiag,MM3	1000	1000	5	0.056	0.019	0.000
WaldDiag,RS2	1000	1000	5	0.053	0.019	0.001
Pearson,MM3	1000	1000	5	0.103	0.049	0.008
Pearson,RS2	1000	1000	5	0.097	0.048	0.010
<b>1F 8V</b>						
Wald	1000	1000	1	0.274	0.174	0.063
WaldVCF	1000	1000	1	0.102	0.054	0.011
WaldDiag,MM3	1000	1000	1	0.064	0.014	0.002
WaldDiag,RS2	1000	1000	1	0.064	0.016	0.003
Pearson,MM3	1000	1000	1	0.119	0.059	0.009
Pearson,RS2	1000	1000	1	0.119	0.062	0.013
<b>1F 15V</b>						
Wald	1000	1000	10	0.789	0.711	0.496
WaldVCF	1000	1000	10	0.155	0.060	0.013
WaldDiag,MM3	1000	1000	10	0.051	0.015	0.000
WaldDiag,RS2	1000	1000	10	0.052	0.016	0.000
Pearson,MM3	1000	1000	10	0.116	0.058	0.008
Pearson,RS2	1000	1000	10	0.118	0.061	0.013
<b>2F 10V</b>						
Wald	1000	1000	10	0.305	0.199	0.084
WaldVCF	1000	1000	10	0.136	0.074	0.013
WaldDiag,MM3	1000	1000	10	0.044	0.018	0.001
WaldDiag,RS2	1000	1000	10	0.044	0.019	0.002
Pearson,MM3	1000	1000	10	0.099	0.045	0.005
Pearson,RS2	1000	1000	10	0.099	0.047	0.007
<b>3F 15V</b>						
Wald	1000	1000	35	0.578	0.448	0.186
WaldVCF	1000	1000	35	0.167	0.077	0.009
WaldDiag,MM3	1000	1000	35	0.046	0.013	0.002
WaldDiag,RS2	1000	1000	35	0.046	0.014	0.002
Pearson,MM3	1000	1000	35	0.129	0.060	0.012
Pearson,RS2	1000	1000	35	0.129	0.063	0.012

Type I errors ( $n = 1000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	0	0.127	0.066	0.014
WaldVCF	1000	1000	0	0.114	0.055	0.011
WaldDiag,MM3	1000	1000	0	0.063	0.026	0.002
WaldDiag,RS2	1000	1000	0	0.060	0.025	0.002
Pearson,MM3	1000	1000	0	0.110	0.056	0.007
Pearson,RS2	1000	1000	0	0.107	0.055	0.008
<b>1F 8V</b>						
Wald	1000	1000	1	0.196	0.128	0.035
WaldVCF	1000	1000	1	0.131	0.068	0.017
WaldDiag,MM3	1000	1000	1	0.087	0.040	0.006
WaldDiag,RS2	1000	1000	1	0.085	0.042	0.007
Pearson,MM3	1000	1000	1	0.117	0.064	0.017
Pearson,RS2	1000	1000	1	0.117	0.068	0.020
<b>1F 15V</b>						
Wald	1000	1000	15	0.427	0.302	0.119
WaldVCF	1000	1000	15	0.154	0.075	0.021
WaldDiag,MM3	1000	1000	15	0.072	0.033	0.003
WaldDiag,RS2	1000	1000	15	0.072	0.036	0.004
Pearson,MM3	1000	1000	15	0.123	0.067	0.020
Pearson,RS2	1000	1000	15	0.123	0.068	0.025
<b>2F 10V</b>						
Wald	1000	1000	11	0.204	0.126	0.034
WaldVCF	1000	1000	11	0.144	0.076	0.014
WaldDiag,MM3	1000	1000	11	0.062	0.026	0.005
WaldDiag,RS2	1000	1000	11	0.062	0.029	0.007
Pearson,MM3	1000	1000	11	0.118	0.057	0.012
Pearson,RS2	1000	1000	11	0.118	0.060	0.014
<b>3F 15V</b>						
Wald	1000	1000	36	0.352	0.249	0.104
WaldVCF	1000	1000	36	0.200	0.126	0.040
WaldDiag,MM3	1000	1000	36	0.106	0.046	0.005
WaldDiag,RS2	1000	1000	36	0.107	0.051	0.006
Pearson,MM3	1000	1000	36	0.146	0.085	0.020
Pearson,RS2	1000	1000	36	0.147	0.087	0.023

Type I errors ( $n = 2000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	2	0.120	0.068	0.021
WaldVCF	1000	1000	2	0.115	0.059	0.014
WaldDiag,MM3	1000	1000	2	0.088	0.037	0.005
WaldDiag,RS2	1000	1000	2	0.082	0.037	0.005
Pearson,MM3	1000	1000	2	0.114	0.061	0.016
Pearson,RS2	1000	1000	2	0.110	0.059	0.017
<b>1F 8V</b>						
Wald	1000	1000	7	0.141	0.078	0.021
WaldVCF	1000	1000	7	0.108	0.053	0.014
WaldDiag,MM3	1000	1000	7	0.079	0.041	0.008
WaldDiag,RS2	1000	1000	7	0.078	0.042	0.009
Pearson,MM3	1000	1000	7	0.129	0.063	0.018
Pearson,RS2	1000	1000	7	0.128	0.066	0.019
<b>1F 15V</b>						
Wald	1000	1000	22	0.263	0.176	0.055
WaldVCF	1000	1000	22	0.161	0.088	0.021
WaldDiag,MM3	1000	1000	22	0.111	0.054	0.009
WaldDiag,RS2	1000	1000	22	0.111	0.056	0.011
Pearson,MM3	1000	1000	22	0.166	0.094	0.019
Pearson,RS2	1000	1000	22	0.166	0.095	0.021
<b>2F 10V</b>						
Wald	1000	1000	19	0.181	0.104	0.029
WaldVCF	1000	1000	19	0.144	0.085	0.015
WaldDiag,MM3	1000	1000	19	0.103	0.052	0.008
WaldDiag,RS2	1000	1000	19	0.103	0.055	0.009
Pearson,MM3	1000	1000	19	0.138	0.085	0.016
Pearson,RS2	1000	1000	19	0.138	0.086	0.020
<b>3F 15V</b>						
Wald	1000	1000	43	0.251	0.154	0.048
WaldVCF	1000	1000	43	0.174	0.091	0.028
WaldDiag,MM3	1000	1000	43	0.091	0.043	0.012
WaldDiag,RS2	1000	1000	43	0.092	0.045	0.015
Pearson,MM3	1000	1000	43	0.140	0.068	0.012
Pearson,RS2	1000	1000	43	0.142	0.072	0.017

Type I errors ( $n = 3000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	0	0.124	0.064	0.013
WaldVCF	1000	1000	0	0.120	0.060	0.012
WaldDiag,MM3	1000	1000	0	0.103	0.042	0.010
WaldDiag,RS2	1000	1000	0	0.100	0.039	0.010
Pearson,MM3	1000	1000	0	0.113	0.055	0.014
Pearson,RS2	1000	1000	0	0.108	0.054	0.016
<b>1F 8V</b>						
Wald	1000	1000	5	0.136	0.077	0.015
WaldVCF	1000	1000	5	0.114	0.066	0.012
WaldDiag,MM3	1000	1000	5	0.101	0.047	0.008
WaldDiag,RS2	1000	1000	5	0.100	0.047	0.009
Pearson,MM3	1000	1000	5	0.128	0.072	0.020
Pearson,RS2	1000	1000	5	0.127	0.074	0.022
<b>1F 15V</b>						
Wald	1000	1000	17	0.227	0.128	0.044
WaldVCF	1000	1000	17	0.150	0.083	0.024
WaldDiag,MM3	1000	1000	17	0.119	0.065	0.013
WaldDiag,RS2	1000	1000	17	0.119	0.070	0.015
Pearson,MM3	1000	1000	17	0.180	0.102	0.025
Pearson,RS2	1000	1000	17	0.180	0.108	0.034
<b>2F 10V</b>						
Wald	1000	1000	26	0.172	0.090	0.018
WaldVCF	1000	1000	26	0.152	0.074	0.013
WaldDiag,MM3	1000	1000	26	0.099	0.054	0.008
WaldDiag,RS2	1000	1000	26	0.099	0.056	0.011
Pearson,MM3	1000	1000	26	0.133	0.075	0.016
Pearson,RS2	1000	1000	26	0.133	0.077	0.020
<b>3F 15V</b>						
Wald	1000	1000	59	0.211	0.124	0.034
WaldVCF	1000	1000	59	0.158	0.080	0.023
WaldDiag,MM3	1000	1000	59	0.117	0.058	0.017
WaldDiag,RS2	1000	1000	59	0.118	0.060	0.019
Pearson,MM3	1000	1000	59	0.154	0.081	0.016
Pearson,RS2	1000	1000	59	0.156	0.084	0.022

Type I errors ( $n = 5000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	2	0.106	0.051	0.014
WaldVCF	1000	1000	2	0.099	0.050	0.012
WaldDiag,MM3	1000	1000	2	0.080	0.040	0.010
WaldDiag,RS2	1000	1000	2	0.076	0.039	0.010
Pearson,MM3	1000	1000	2	0.118	0.050	0.012
Pearson,RS2	1000	1000	2	0.116	0.047	0.012
<b>1F 8V</b>						
Wald	1000	1000	3	0.114	0.065	0.016
WaldVCF	1000	1000	3	0.108	0.053	0.015
WaldDiag,MM3	1000	1000	3	0.102	0.053	0.014
WaldDiag,RS2	1000	1000	3	0.102	0.055	0.016
Pearson,MM3	1000	1000	3	0.119	0.056	0.021
Pearson,RS2	1000	1000	3	0.118	0.059	0.023
<b>1F 15V</b>						
Wald	1000	1000	26	0.191	0.103	0.025
WaldVCF	1000	1000	26	0.155	0.079	0.015
WaldDiag,MM3	1000	1000	26	0.114	0.064	0.013
WaldDiag,RS2	1000	1000	26	0.115	0.065	0.014
Pearson,MM3	1000	1000	26	0.169	0.093	0.020
Pearson,RS2	1000	1000	26	0.170	0.094	0.022
<b>2F 10V</b>						
Wald	1000	1000	11	0.142	0.082	0.027
WaldVCF	1000	1000	11	0.130	0.071	0.023
WaldDiag,MM3	1000	1000	11	0.101	0.048	0.012
WaldDiag,RS2	1000	1000	11	0.101	0.049	0.012
Pearson,MM3	1000	1000	11	0.116	0.063	0.017
Pearson,RS2	1000	1000	11	0.116	0.070	0.018
<b>3F 15V</b>						
Wald	1000	1000	67	0.192	0.110	0.027
WaldVCF	1000	1000	67	0.162	0.091	0.021
WaldDiag,MM3	1000	1000	67	0.121	0.060	0.008
WaldDiag,RS2	1000	1000	67	0.121	0.063	0.008
Pearson,MM3	1000	1000	67	0.153	0.073	0.023
Pearson,RS2	1000	1000	67	0.155	0.077	0.024



Type I errors ( $n = 10000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.117	0.063	0.013
WaldVCF	1000	1000	1	0.116	0.063	0.013
WaldDiag,MM3	1000	1000	1	0.102	0.054	0.006
WaldDiag,RS2	1000	1000	1	0.100	0.052	0.006
Pearson,MM3	1000	1000	1	0.116	0.058	0.011
Pearson,RS2	1000	1000	1	0.110	0.055	0.011
<b>1F 8V</b>						
Wald	1000	1000	5	0.125	0.064	0.012
WaldVCF	1000	1000	5	0.119	0.062	0.011
WaldDiag,MM3	1000	1000	5	0.097	0.040	0.011
WaldDiag,RS2	1000	1000	5	0.097	0.042	0.014
Pearson,MM3	1000	1000	5	0.131	0.066	0.015
Pearson,RS2	1000	1000	5	0.130	0.067	0.017
<b>1F 15V</b>						
Wald	1000	1000	37	0.164	0.095	0.028
WaldVCF	1000	1000	37	0.145	0.083	0.023
WaldDiag,MM3	1000	1000	37	0.128	0.061	0.015
WaldDiag,RS2	1000	1000	37	0.128	0.062	0.017
Pearson,MM3	1000	1000	37	0.180	0.120	0.026
Pearson,RS2	1000	1000	37	0.180	0.121	0.032
<b>2F 10V</b>						
Wald	1000	1000	30	0.135	0.074	0.024
WaldVCF	1000	1000	30	0.124	0.068	0.020
WaldDiag,MM3	1000	1000	30	0.121	0.063	0.011
WaldDiag,RS2	1000	1000	30	0.121	0.064	0.012
Pearson,MM3	1000	1000	30	0.115	0.067	0.016
Pearson,RS2	1000	1000	30	0.115	0.069	0.018
<b>3F 15V</b>						
Wald	1000	1000	77	0.191	0.105	0.022
WaldVCF	1000	1000	77	0.166	0.086	0.014
WaldDiag,MM3	1000	1000	77	0.137	0.072	0.010
WaldDiag,RS2	1000	1000	77	0.137	0.074	0.010
Pearson,MM3	1000	1000	77	0.162	0.081	0.021
Pearson,RS2	1000	1000	77	0.162	0.085	0.022

Power ( $n = 500$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.350	0.243	0.107
WaldVCF	1000	1000	1	0.307	0.199	0.075
WaldDiag,MM3	1000	1000	1	0.144	0.061	0.013
WaldDiag,RS2	1000	1000	1	0.144	0.062	0.015
Pearson,MM3	1000	1000	1	0.331	0.225	0.077
Pearson,RS2	1000	1000	1	0.331	0.230	0.090
<b>1F 8V</b>						
Wald	1000	1000	1	0.747	0.640	0.430
WaldVCF	1000	1000	1	0.459	0.305	0.117
WaldDiag,MM3	1000	1000	1	0.311	0.186	0.044
WaldDiag,RS2	1000	1000	1	0.312	0.193	0.052
Pearson,MM3	1000	1000	1	0.368	0.224	0.074
Pearson,RS2	1000	1000	1	0.368	0.230	0.087
<b>1F 15V</b>						
Wald	1000	1000	8	0.985	0.969	0.897
WaldVCF	1000	1000	8	0.420	0.273	0.073
WaldDiag,MM3	1000	1000	8	0.266	0.135	0.031
WaldDiag,RS2	1000	1000	8	0.270	0.146	0.034
Pearson,MM3	1000	1000	8	0.566	0.438	0.186
Pearson,RS2	1000	1000	8	0.569	0.444	0.211
<b>2F 10V</b>						
Wald	1000	1000	7	0.458	0.324	0.163
WaldVCF	1000	1000	7	0.201	0.117	0.029
WaldDiag,MM3	1000	1000	7	0.116	0.043	0.005
WaldDiag,RS2	1000	1000	7	0.118	0.049	0.006
Pearson,MM3	1000	1000	7	0.252	0.148	0.038
Pearson,RS2	1000	1000	7	0.254	0.157	0.048
<b>3F 15V</b>						
Wald	1000	1000	27	0.696	0.582	0.318
WaldVCF	1000	1000	27	0.234	0.132	0.028
WaldDiag,MM3	1000	1000	27	0.102	0.048	0.006
WaldDiag,RS2	1000	1000	27	0.103	0.051	0.008
Pearson,MM3	1000	1000	27	0.283	0.178	0.053
Pearson,RS2	1000	1000	27	0.286	0.185	0.067

Power ( $n = 1000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.578	0.457	0.249
WaldVCF	1000	1000	1	0.567	0.439	0.221
WaldDiag,MM3	1000	1000	1	0.386	0.261	0.075
WaldDiag,RS2	1000	1000	1	0.384	0.264	0.087
Pearson,MM3	1000	1000	1	0.627	0.522	0.307
Pearson,RS2	1000	1000	1	0.626	0.523	0.317
<b>1F 8V</b>						
Wald	1000	1000	2	0.930	0.888	0.714
WaldVCF	1000	1000	2	0.860	0.754	0.499
WaldDiag,MM3	1000	1000	2	0.714	0.574	0.270
WaldDiag,RS2	1000	1000	2	0.715	0.578	0.287
Pearson,MM3	1000	1000	2	0.679	0.544	0.295
Pearson,RS2	1000	1000	2	0.681	0.554	0.326
<b>1F 15V</b>						
Wald	1000	1000	13	0.930	0.876	0.720
WaldVCF	1000	1000	13	0.685	0.535	0.269
WaldDiag,MM3	1000	1000	13	0.592	0.427	0.160
WaldDiag,RS2	1000	1000	13	0.597	0.439	0.182
Pearson,MM3	1000	1000	13	0.870	0.792	0.599
Pearson,RS2	1000	1000	13	0.872	0.800	0.619
<b>2F 10V</b>						
Wald	1000	1000	11	0.431	0.301	0.127
WaldVCF	1000	1000	11	0.307	0.180	0.068
WaldDiag,MM3	1000	1000	11	0.268	0.146	0.048
WaldDiag,RS2	1000	1000	11	0.272	0.152	0.054
Pearson,MM3	1000	1000	11	0.406	0.287	0.128
Pearson,RS2	1000	1000	11	0.407	0.300	0.148
<b>3F 15V</b>						
Wald	1000	1000	38	0.619	0.494	0.243
WaldVCF	1000	1000	38	0.409	0.261	0.100
WaldDiag,MM3	1000	1000	38	0.383	0.252	0.077
WaldDiag,RS2	1000	1000	38	0.384	0.264	0.082
Pearson,MM3	1000	1000	38	0.617	0.480	0.271
Pearson,RS2	1000	1000	38	0.620	0.489	0.294

Power ( $n = 2000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	0	0.821	0.722	0.484
WaldVCF	1000	1000	0	0.813	0.716	0.474
WaldDiag,MM3	1000	1000	0	0.663	0.522	0.264
WaldDiag,RS2	1000	1000	0	0.661	0.530	0.274
Pearson,MM3	1000	1000	0	0.863	0.793	0.589
Pearson,RS2	1000	1000	0	0.863	0.795	0.609
<b>1F 8V</b>						
Wald	1000	1000	3	0.998	0.995	0.974
WaldVCF	1000	1000	3	0.996	0.988	0.950
WaldDiag,MM3	1000	1000	3	0.978	0.953	0.791
WaldDiag,RS2	1000	1000	3	0.978	0.954	0.813
Pearson,MM3	1000	1000	3	0.959	0.915	0.737
Pearson,RS2	1000	1000	3	0.959	0.918	0.755
<b>1F 15V</b>						
Wald	1000	1000	12	0.959	0.930	0.818
WaldVCF	1000	1000	12	0.911	0.851	0.649
WaldDiag,MM3	1000	1000	12	0.886	0.817	0.601
WaldDiag,RS2	1000	1000	12	0.889	0.822	0.623
Pearson,MM3	1000	1000	12	0.992	0.980	0.949
Pearson,RS2	1000	1000	12	0.992	0.982	0.952
<b>2F 10V</b>						
Wald	1000	1000	9	0.533	0.385	0.193
WaldVCF	1000	1000	9	0.448	0.312	0.137
WaldDiag,MM3	1000	1000	9	0.525	0.382	0.158
WaldDiag,RS2	1000	1000	9	0.527	0.389	0.183
Pearson,MM3	1000	1000	9	0.665	0.552	0.339
Pearson,RS2	1000	1000	9	0.665	0.556	0.370
<b>3F 15V</b>						
Wald	1000	1000	38	0.750	0.635	0.360
WaldVCF	1000	1000	38	0.652	0.497	0.238
WaldDiag,MM3	1000	1000	38	0.726	0.597	0.324
WaldDiag,RS2	1000	1000	38	0.729	0.605	0.349
Pearson,MM3	1000	1000	38	0.887	0.821	0.624
Pearson,RS2	1000	1000	38	0.889	0.827	0.659

Power ( $n = 3000$ )

Name	No. repl.	Converged	Rank def.	Rejection rate		
				10%	5%	1%
<b>1F 5V</b>						
Wald	1000	1000	1	0.947	0.901	0.755
WaldVCF	1000	1000	1	0.947	0.900	0.750
WaldDiag,MM3	1000	1000	1	0.885	0.778	0.523
WaldDiag,RS2	1000	1000	1	0.883	0.784	0.534
Pearson,MM3	1000	1000	1	0.964	0.938	0.821
Pearson,RS2	1000	1000	1	0.964	0.938	0.832
<b>1F 8V</b>						
Wald	1000	1000	0	1.000	1.000	0.999
WaldVCF	1000	1000	0	1.000	1.000	0.998
WaldDiag,MM3	1000	1000	0	1.000	0.998	0.987
WaldDiag,RS2	1000	1000	0	1.000	0.999	0.988
Pearson,MM3	1000	1000	0	0.999	0.998	0.965
Pearson,RS2	1000	1000	0	0.999	0.998	0.970
<b>1F 15V</b>						
Wald	1000	1000	10	0.998	0.992	0.950
WaldVCF	1000	1000	10	0.994	0.972	0.921
WaldDiag,MM3	1000	1000	10	0.991	0.977	0.904
WaldDiag,RS2	1000	1000	10	0.991	0.979	0.912
Pearson,MM3	1000	1000	10	1.000	1.000	0.999
Pearson,RS2	1000	1000	10	1.000	1.000	0.999
<b>2F 10V</b>						
Wald	1000	1000	6	0.671	0.550	0.314
WaldVCF	1000	1000	6	0.616	0.489	0.251
WaldDiag,MM3	1000	1000	6	0.730	0.609	0.348
WaldDiag,RS2	1000	1000	6	0.734	0.616	0.381
Pearson,MM3	1000	1000	6	0.845	0.765	0.556
Pearson,RS2	1000	1000	6	0.845	0.770	0.589
<b>3F 15V</b>						
Wald	1000	1000	34	0.887	0.811	0.598
WaldVCF	1000	1000	34	0.846	0.745	0.495
WaldDiag,MM3	1000	1000	34	0.909	0.840	0.643
WaldDiag,RS2	1000	1000	34	0.912	0.847	0.664
Pearson,MM3	1000	1000	34	0.976	0.957	0.891
Pearson,RS2	1000	1000	34	0.976	0.960	0.902

Power ( $n = 5000$ )

					Rejection rate		
<b>1F 5V</b>							
<b>1F 8V</b>							
<b>1F 15V</b>							
<b>2F 10V</b>							
<b>3F 15V</b>							
Name	No. repl.	Converged	Rank def.		10%	5%	1%

Power ( $n = 10000$ )

					Rejection rate		
<b>1F 5V</b>							
<b>1F 8V</b>							
<b>1F 15V</b>							
<b>2F 10V</b>							
<b>3F 15V</b>							
Name	No. repl.	Converged	Rank def.		10%	5%	1%