**Supplementary Table 2 Analysis of variance of sensitivity of both the *G*min and *F*ST measures at varying quantile thresholds under a model including gene flow. Column values are the percent variance in each measure described by each parameter or interaction of parameters, filtered to include only those with an effect greater than 1%.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 5% *quantile* | |  | 1% *quantile* | |  | 0.1% *quantile* | |
| *parameters* | *G*min | *F*ST |  | *G*min | *F*ST |  | *G*min | *F*ST |
| *τ*D | 9.7 | 6.8 |  | 4.3 | 3.3 |  | 2.3 | 1.6 |
| *ρ* | 0.0 | 0.3 |  | 1.2 | 0.2 |  | 1.2 | 0.4 |
| *n*2 | 7.0 | 25.9 |  | 4.3 | 14.1 |  | 2.6 | 3.9 |
| *λ* | 1.4 | 0.3 |  | 1.1 | 0.2 |  | 0.8 | 0.2 |
| *τ*M | 23.9 | 13.3 |  | 16.7 | 9.3 |  | 11.8 | 4.4 |
| *τ*D × *ρ* | 4.3 | 0.5 |  | 1.0 | 0.1 |  | 0.2 | 0.0 |
| *τ*D × *n*2 | 0.5 | 0.8 |  | 0.4 | 2.3 |  | 0.4 | 1.5 |
| *ρ* × *n*2 | 1.1 | 1.5 |  | 0.1 | 0.0 |  | 0.0 | 0.4 |
| *τ*D × *τ*M | 5.2 | 3.7 |  | 4.1 | 3.9 |  | 3.2 | 2.7 |
| *n*2 × *τ*M | 3.6 | 9.1 |  | 3.7 | 8.6 |  | 3.1 | 4.4 |
| *λ* × *τ*M | 1.8 | 0.3 |  | 1.7 | 0.3 |  | 1.5 | 0.3 |
| *τ*D × *ρ* × *τ*M | 1.9 | 0.2 |  | 0.8 | 0.0 |  | 0.2 | 0.1 |
| *τ*D × *n*2 × *τ*M | 0.3 | 2.4 |  | 0.6 | 3.4 |  | 0.6 | 2.6 |
| coalescent | 33.0 | 32.7 |  | 56.0 | 51.8 |  | 67.3 | 73.3 |