Parameter True.value Estimate Coverage.TMB Coverage.Profile

$\\lambda\_{1}$ 1.000 0.98369125 93.0 93.0

$\\lambda\_{2}$ 4.000 3.96824710 90.0 90.0

$\\lambda\_{3}$ 7.000 7.08104630 90.0 **89.5**

$\\gamma\_{1, 1}$ 0.950 0.94981908 92.0 100.0

$\\gamma\_{1, 2}$ 0.025 0.02700752 94.0 93.5

$\\gamma\_{1, 3}$ 0.025 0.02317340 95.0 95.5

$\\gamma\_{2, 1}$ 0.050 0.04744139 96.5 95.5

$\\gamma\_{2, 2}$ 0.900 0.92261388 96.5 99.5

$\\gamma\_{2, 3}$ 0.050 0.02994473 94.5 93.5

$\\gamma\_{3, 1}$ 0.075 0.06980972 96.5 91.5

$\\gamma\_{3, 2}$ 0.075 0.05859512 92.5 91.5

$\\gamma\_{3, 3}$ 0.850 0.87159517 93.5 100.0

Parameter True.value Estimate Coverage.TMB Coverage.Profile

$\\lambda\_{1}$ 1.000 1.00085275 96.5 96.5

$\\lambda\_{2}$ 6.000 5.97787137 94.0 94.5

$\\lambda\_{3}$ 11.000 11.05097492 95.5 96.0

$\\gamma\_{1, 1}$ 0.950 0.95062211 91.0 99.0

$\\gamma\_{1, 2}$ 0.025 0.02582959 95.5 93.5

$\\gamma\_{1, 3}$ 0.025 0.02354830 94.0 93.5

$\\gamma\_{2, 1}$ 0.050 0.04751106 94.5 93.0

$\\gamma\_{2, 2}$ 0.900 0.92029135 95.0 99.0

$\\gamma\_{2, 3}$ 0.050 0.03219759 93.0 91.5

$\\gamma\_{3, 1}$ 0.075 0.06755518 93.0 **90.5**

$\\gamma\_{3, 2}$ 0.075 0.06014983 93.5 92.5

$\\gamma\_{3, 3}$ 0.850 0.87229499 93.5 98.5

Parameter True.value Estimate Coverage.TMB Coverage.Profile

$\\lambda\_{1}$ 1.000 1.00739405 97.0 97.0

$\\lambda\_{2}$ 10.500 10.47463271 93.5 93.5

$\\lambda\_{3}$ 20.000 19.86665362 94.0 94.0

$\\gamma\_{1, 1}$ 0.950 0.95217762 94.5 99.5

$\\gamma\_{1, 2}$ 0.025 0.02240685 94.0 **92.5**

$\\gamma\_{1, 3}$ 0.025 0.02541553 94.0 **92.5**

$\\gamma\_{2, 1}$ 0.050 0.04772084 97.0 94.5

$\\gamma\_{2, 2}$ 0.900 0.92114322 96.5 100.0

$\\gamma\_{2, 3}$ 0.050 0.03113594 97.0 95.5

$\\gamma\_{3, 1}$ 0.075 0.06136633 94.5 **92.5**

$\\gamma\_{3, 2}$ 0.075 0.06990089 95.5 95.0

$\\gamma\_{3, 3}$ 0.850 0.86873278 96.0 99.0

1. γ11 -> 0.9

Parameter True.value Estimate Coverage.TMB Coverage.Profile

$\\lambda\_{1}$ 1.000 0.99963348 95.0 95.0

$\\lambda\_{2}$ 4.000 4.01791592 97.0 97.0

$\\lambda\_{3}$ 7.000 7.02010976 93.5 93.0

$\\gamma\_{1, 1}$ 0.900 0.90772541 92.5 100.0

$\\gamma\_{1, 2}$ 0.050 0.04818830 93.0 92.0

$\\gamma\_{1, 3}$ 0.050 0.04408629 93.5 92.5

$\\gamma\_{2, 1}$ 0.050 0.03987523 93.5 **90.0**

$\\gamma\_{2, 2}$ 0.900 0.92479011 91.5 100.0

$\\gamma\_{2, 3}$ 0.050 0.03533465 93.5 91.0

$\\gamma\_{3, 1}$ 0.075 0.09022558 95.5 92.5

$\\gamma\_{3, 2}$ 0.075 0.06445218 93.0 **90.0**

$\\gamma\_{3, 3}$ 0.850 0.84532224 95.5 99.5

1. γ11 -> 0.9

Parameter True.value Estimate Coverage.TMB Coverage.Profile

$\\lambda\_{1}$ 1.000 1.03255575 94.5 94.5

$\\lambda\_{2}$ 6.000 5.92613100 83.5 **83.5**

$\\lambda\_{3}$ 11.000 10.94176708 90.5 89.5

$\\gamma\_{1, 1}$ 0.900 0.90798543 90.5 99.5

$\\gamma\_{1, 2}$ 0.050 0.04420475 94.0 92.0

$\\gamma\_{1, 3}$ 0.050 0.04780983 95.5 94.5

$\\gamma\_{2, 1}$ 0.050 0.04477647 91.0 90.0

$\\gamma\_{2, 2}$ 0.900 0.91471623 87.0 93.5

$\\gamma\_{2, 3}$ 0.050 0.04050730 86.5 84.0

$\\gamma\_{3, 1}$ 0.075 0.08086447 89.0 85.5

$\\gamma\_{3, 2}$ 0.075 0.08067858 89.0 87.0

$\\gamma\_{3, 3}$ 0.850 0.83845695 89.0 92.5

1. γ11 -> 0.9

Parameter True.value Estimate Coverage.TMB Coverage.Profile

$\\lambda\_{1}$ 1.000 0.99123513 94.0 93.0

$\\lambda\_{2}$ 10.500 10.43239177 93.0 92.5

$\\lambda\_{3}$ 20.000 20.00933956 96.5 96.5

$\\gamma\_{1, 1}$ 0.900 0.90617651 94.0 98.5

$\\gamma\_{1, 2}$ 0.050 0.04473727 95.0 94.0

$\\gamma\_{1, 3}$ 0.050 0.04908622 93.0 91.5

$\\gamma\_{2, 1}$ 0.050 0.04378679 94.0 93.5

$\\gamma\_{2, 2}$ 0.900 0.91273311 96.5 100.0

$\\gamma\_{2, 3}$ 0.050 0.04348010 96.5 95.0

$\\gamma\_{3, 1}$ 0.075 0.08313488 93.5 91.5

$\\gamma\_{3, 2}$ 0.075 0.08333440 94.0 **91.0**

$\\gamma\_{3, 3}$ 0.850 0.83353072 97.0 100.0

1. γ33 -> 0.9

Parameter True.value Estimate Coverage.TMB Coverage.Profile

$\\lambda\_{1}$ 1.000 0.97336619 98.0 98.0

$\\lambda\_{2}$ 4.000 3.95166272 94.5 94.5

$\\lambda\_{3}$ 7.000 7.03550256 93.5 94.0

$\\gamma\_{1, 1}$ 0.950 0.95075271 97.0 99.5

$\\gamma\_{1, 2}$ 0.025 0.02115693 95.0 95.5

$\\gamma\_{1, 3}$ 0.025 0.02809037 94.5 94.0

$\\gamma\_{2, 1}$ 0.050 0.04568080 93.5 92.0

$\\gamma\_{2, 2}$ 0.900 0.90106012 93.5 100.0

$\\gamma\_{2, 3}$ 0.050 0.05325908 92.0 93.0

$\\gamma\_{3, 1}$ 0.050 0.04463485 96.0 94.0

$\\gamma\_{3, 2}$ 0.050 0.04729114 91.5 **88.5**

$\\gamma\_{3, 3}$ 0.900 0.90807401 90.5 98.5

1. γ33 -> 0.9

Parameter True.value Estimate Coverage.TMB Coverage.Profile

$\\lambda\_{1}$ 1.000 0.98602203 92.5 93.0

$\\lambda\_{2}$ 6.000 5.95995420 91.0 **91.0**

$\\lambda\_{3}$ 11.000 11.22386779 97.5 97.5

$\\gamma\_{1, 1}$ 0.950 0.94914848 95.0 100.0

$\\gamma\_{1, 2}$ 0.025 0.02189439 96.0 96.5

$\\gamma\_{1, 3}$ 0.025 0.02895714 94.0 93.5

$\\gamma\_{2, 1}$ 0.050 0.04986053 92.5 92.5

$\\gamma\_{2, 2}$ 0.900 0.90046000 94.5 100.0

$\\gamma\_{2, 3}$ 0.050 0.04967947 92.0 92.5

$\\gamma\_{3, 1}$ 0.050 0.04416278 94.5 93.0

$\\gamma\_{3, 2}$ 0.050 0.04764116 94.5 93.0

$\\gamma\_{3, 3}$ 0.900 0.90819606 95.5 99.5

1. γ33 -> 0.9

Parameter True.value Estimate Coverage.TMB Coverage.Profile

$\\lambda\_{1}$ 1.000 0.99345535 97.5 97.5

$\\lambda\_{2}$ 10.500 10.52299017 95.5 95.0

$\\lambda\_{3}$ 20.000 19.91260292 93.5 93.5

$\\gamma\_{1, 1}$ 0.950 0.95142835 94.5 100.0

$\\gamma\_{1, 2}$ 0.025 0.02214925 93.0 92.5

$\\gamma\_{1, 3}$ 0.025 0.02642240 95.0 94.0

$\\gamma\_{2, 1}$ 0.050 0.05007714 92.5 **91.5**

$\\gamma\_{2, 2}$ 0.900 0.90189595 90.0 99.0

$\\gamma\_{2, 3}$ 0.050 0.04802691 94.5 94.5

$\\gamma\_{3, 1}$ 0.050 0.04038029 93.0 93.0

$\\gamma\_{3, 2}$ 0.050 0.04419118 95.0 94.5

$\\gamma\_{3, 3}$ 0.900 0.91542853 93.5 99.5