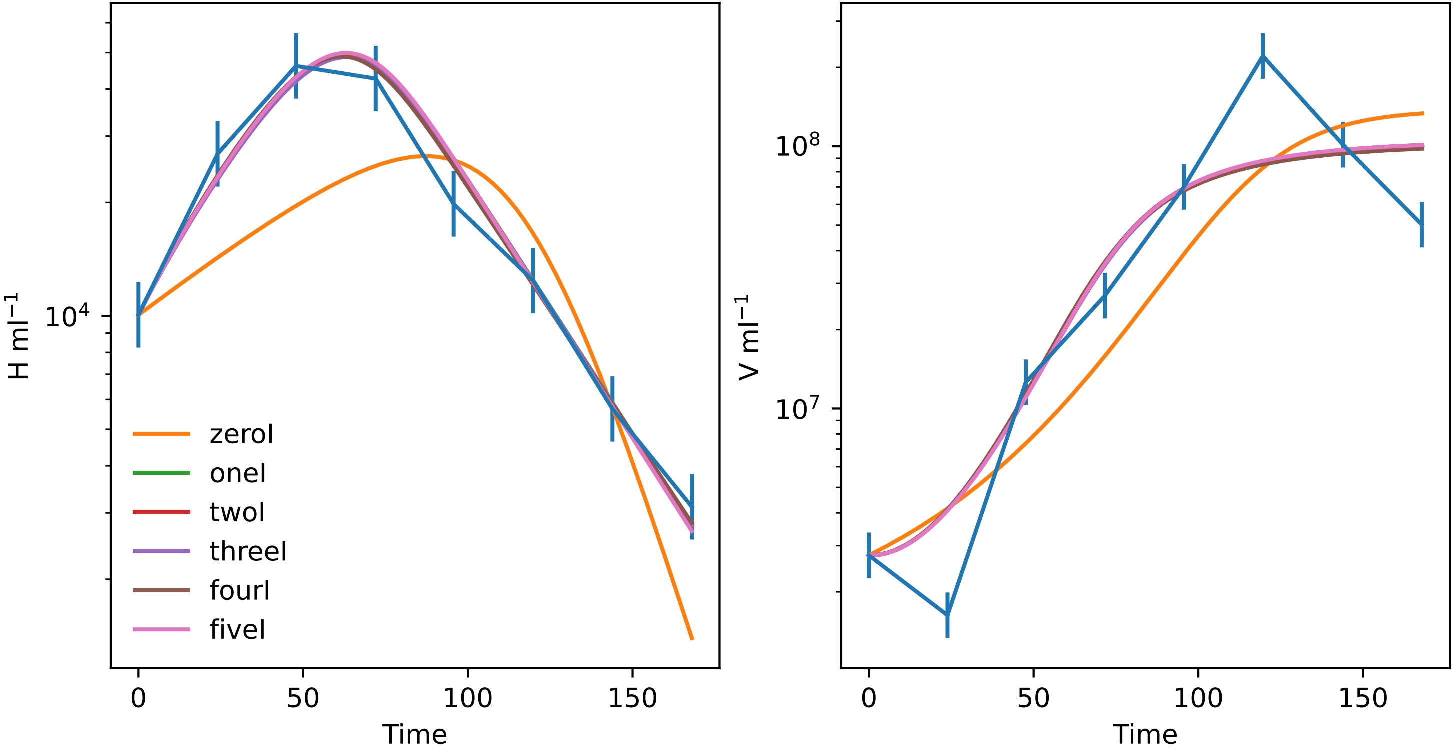
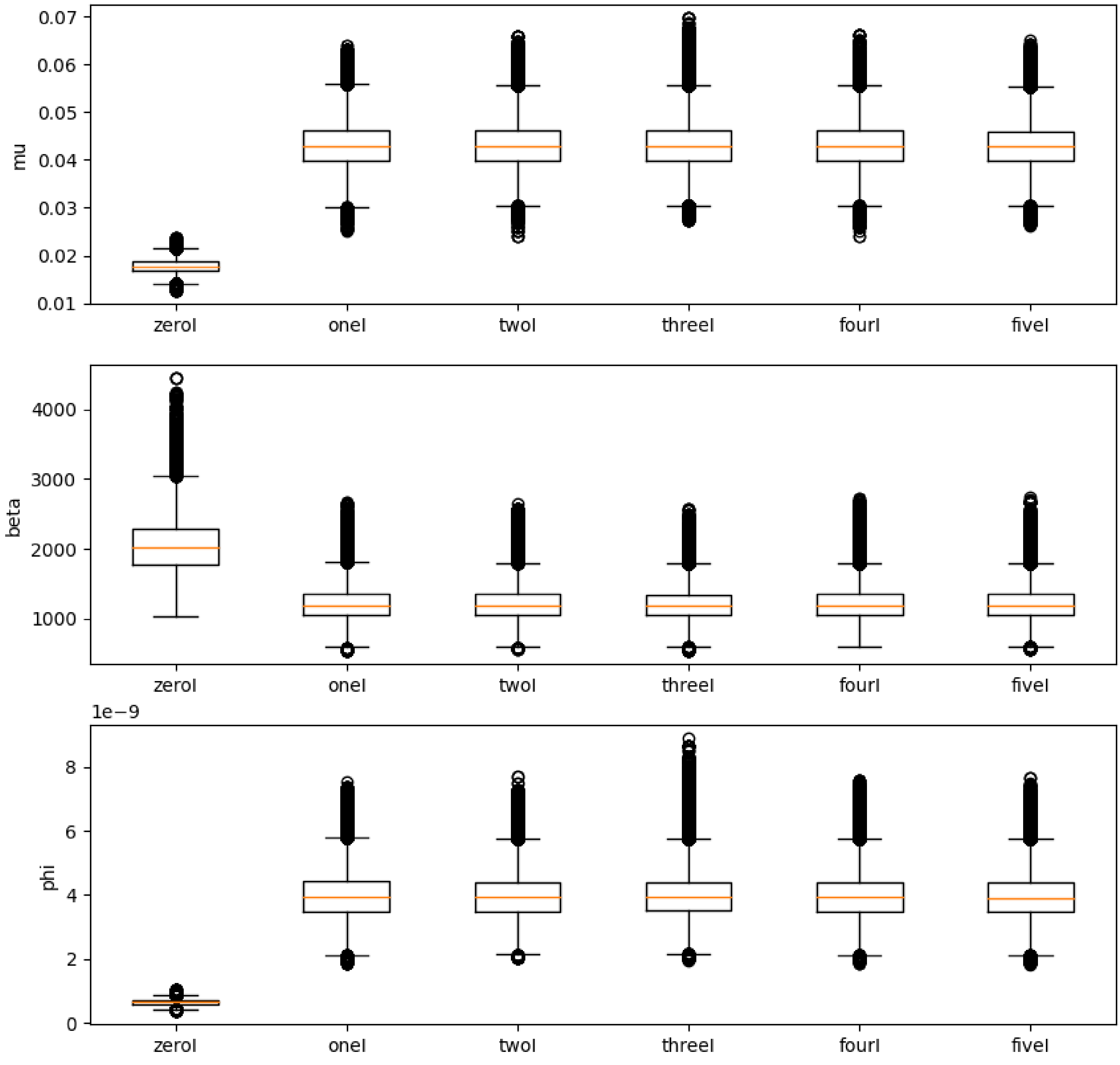
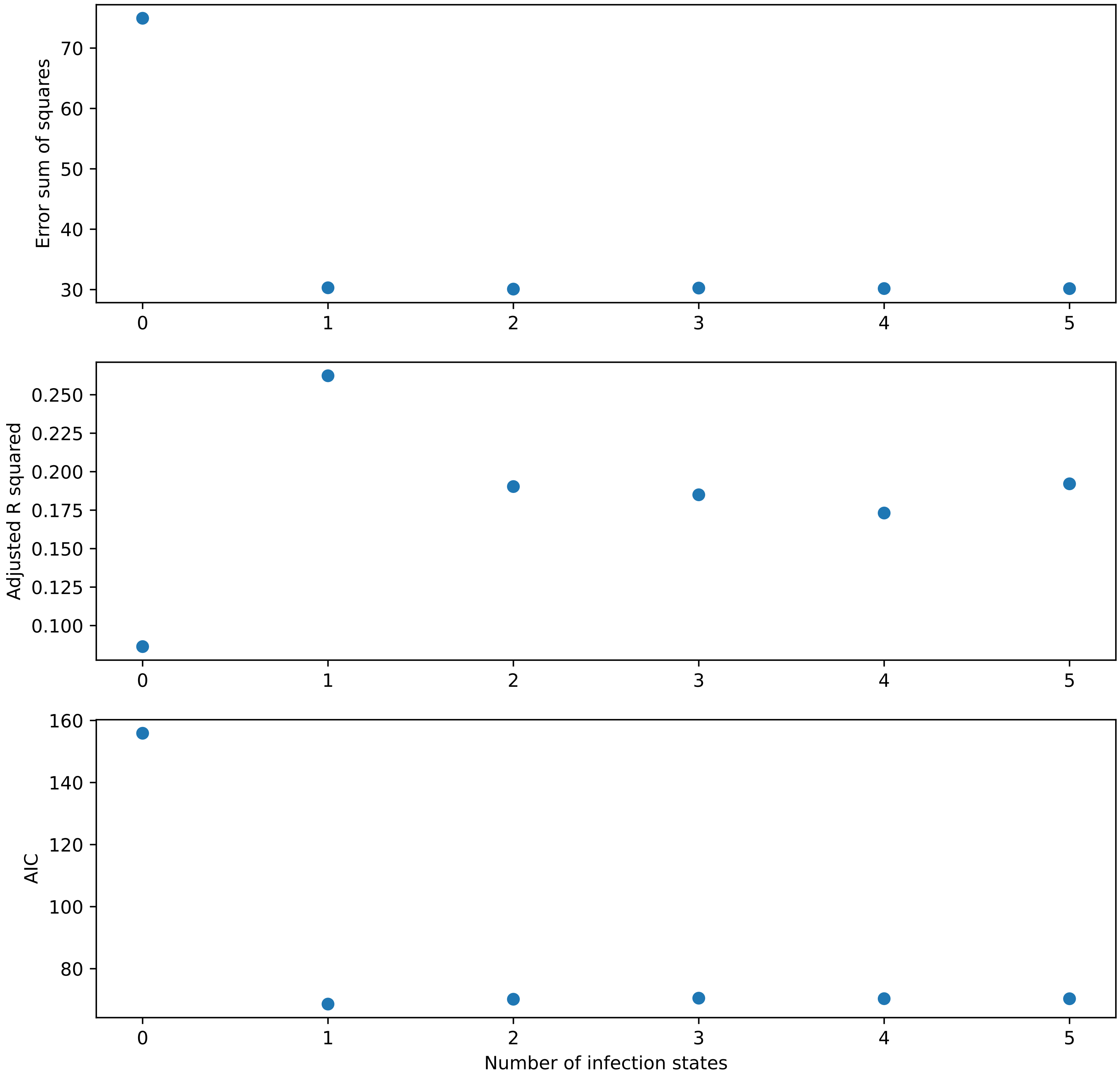
Tomaru57


H ml^{-1}
10^4
0
50
100
150
Time
zeroI
oneI
twoI
threeI
fourI
fiveI
V ml^{-1}
10^8
10^7
0
50
100
150
Time

Tomaru57

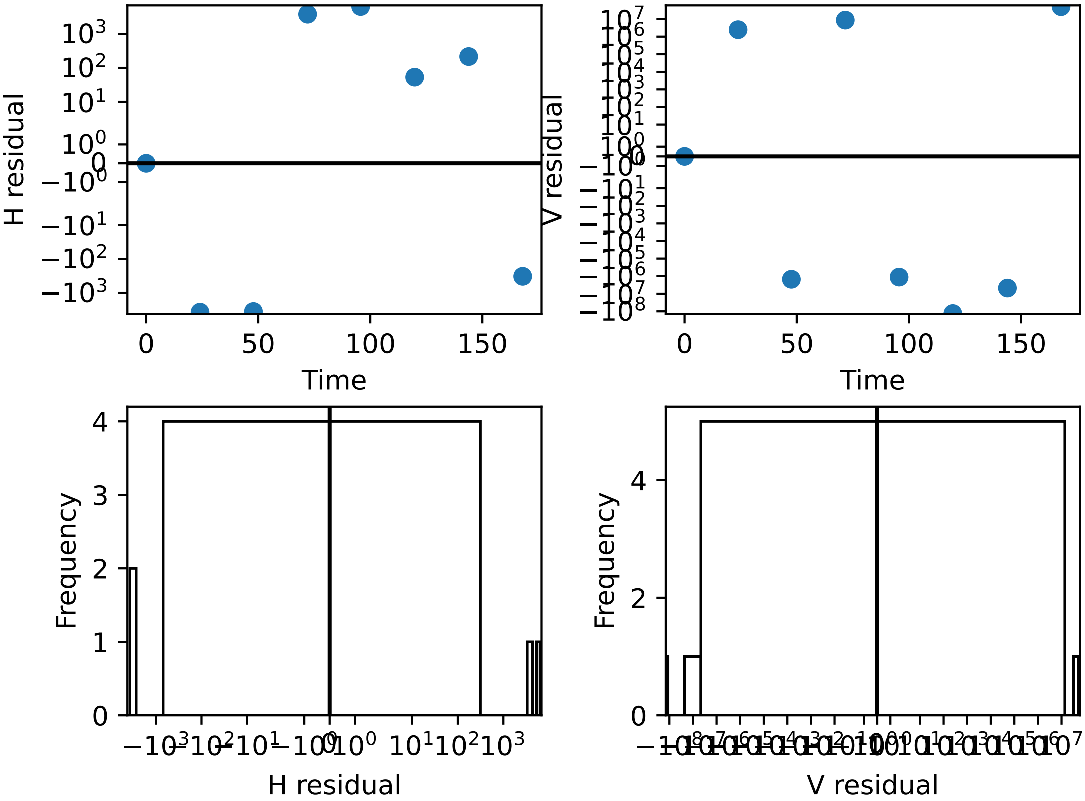

mu
0.07
0.06
0.05
0.04
0.03
0.02
0.01
zeroI
oneI
twoI
threeI
fourI
fiveI
beta
4000
3000
2000
1000
zeroI
oneI
twoI
threeI
fourI
fiveI
1e−9
phi
8
6
4
2
0
zeroI
oneI
twoI
threeI
fourI
fiveI

Tomaru57

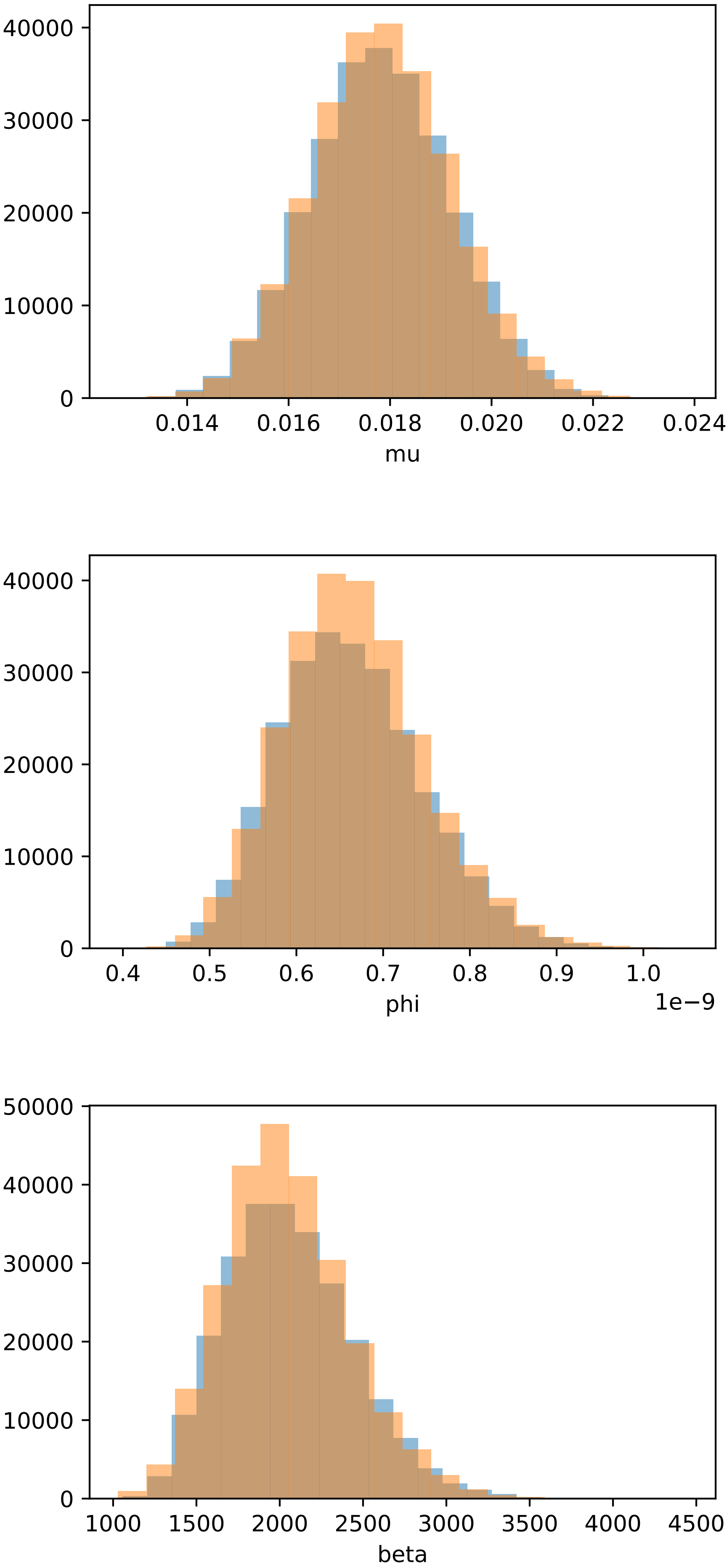


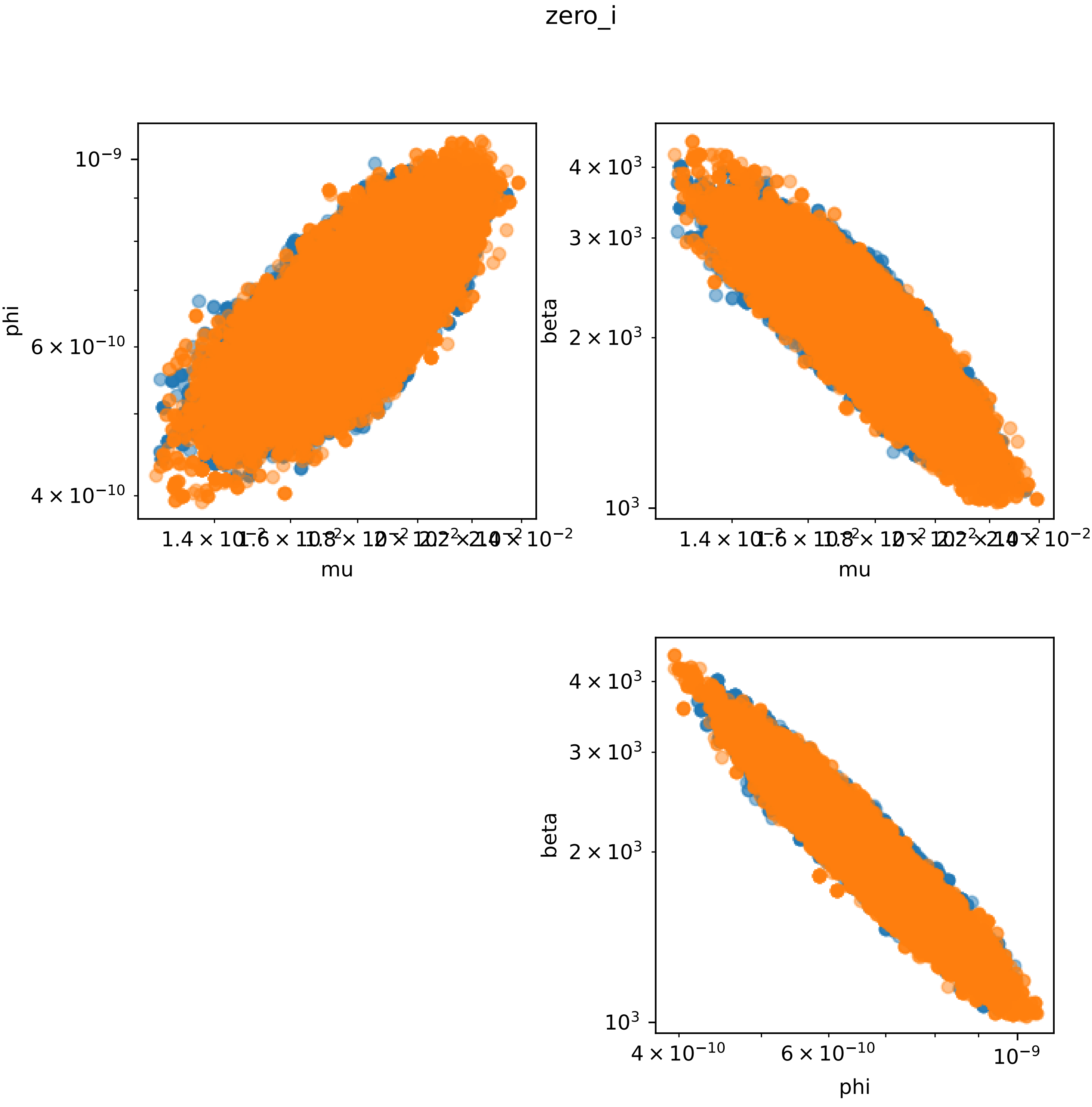
Error sum of squares
70
60
50
40
30
0
1
2
3
4
5
Adjusted R squared
0.250
0.225
0.200
0.175
0.150
0.125
0.100
0
1
2
3
4
5
AIC
160
140
120
100
80
0
1
2
3
4
5
Number of infection states

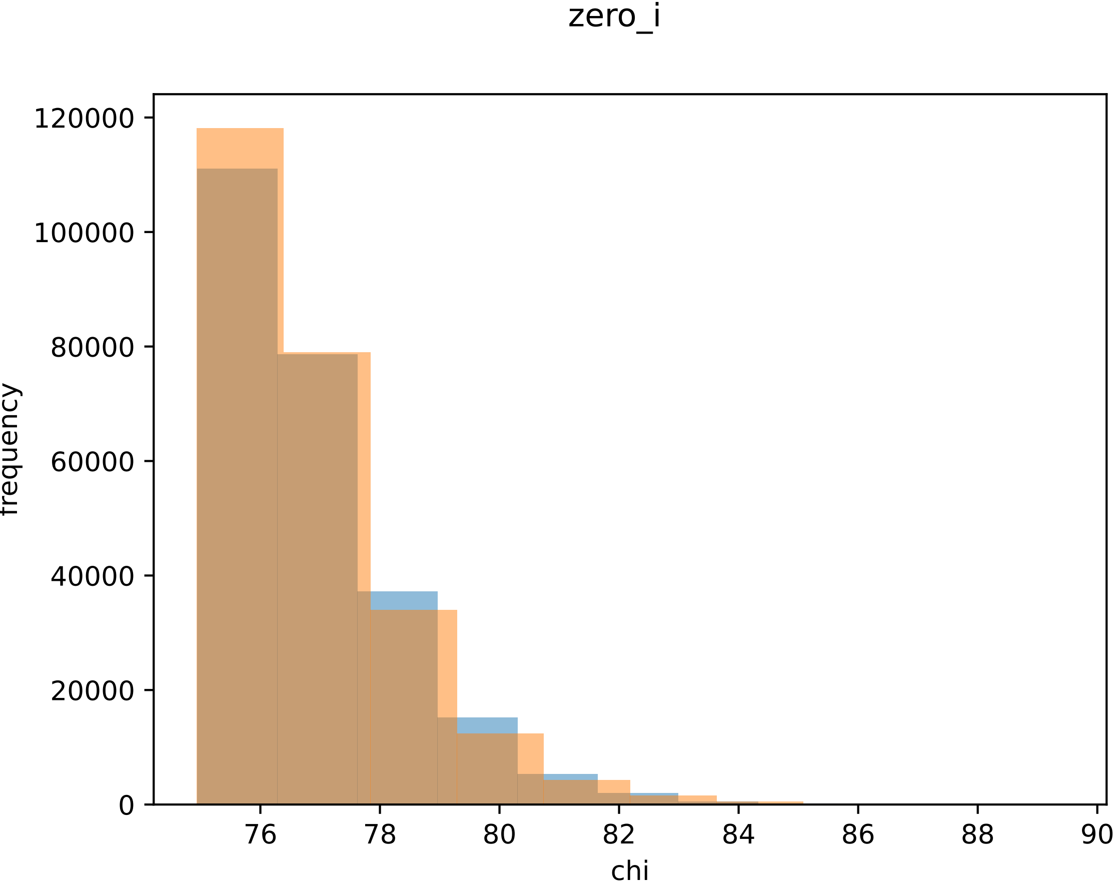
Residuals for model with lowest AIC



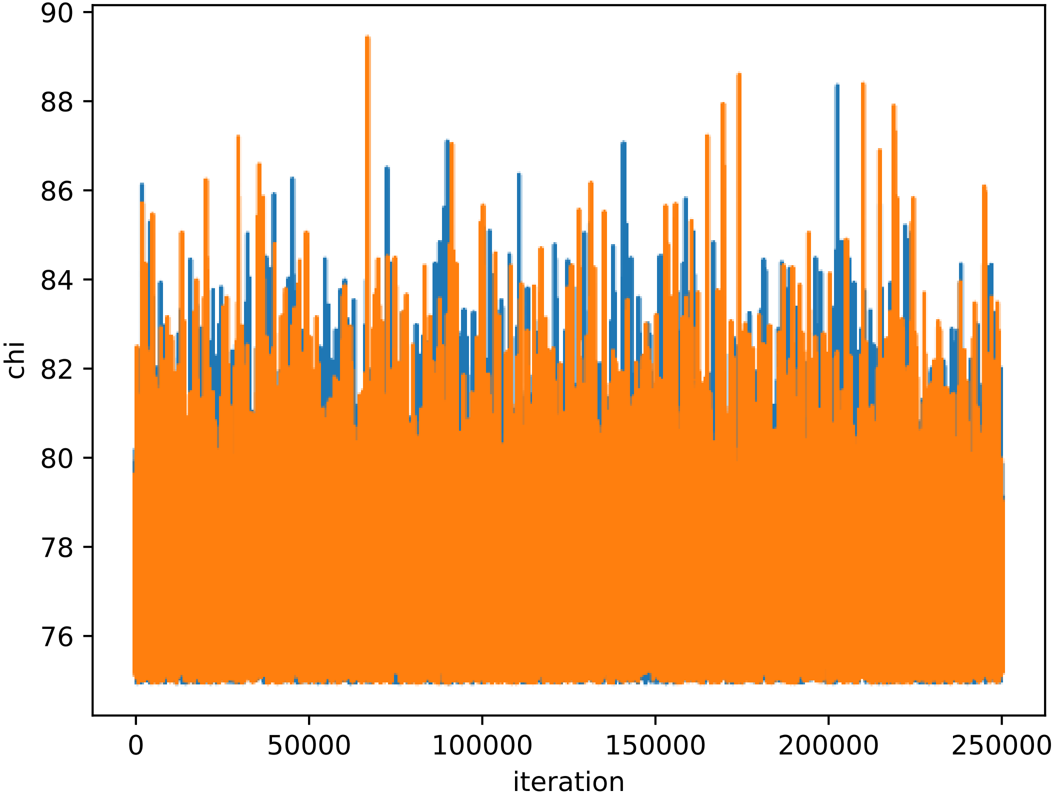
zero_i


40000
30000
20000
10000
0
0.014
0.016
0.018
0.020
0.022
0.024
mu
40000
30000
20000
10000
0
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1e−9
phi
50000
40000
30000
20000
10000
0
1000
1500
2000
2500
3000
3500
4000
4500
beta

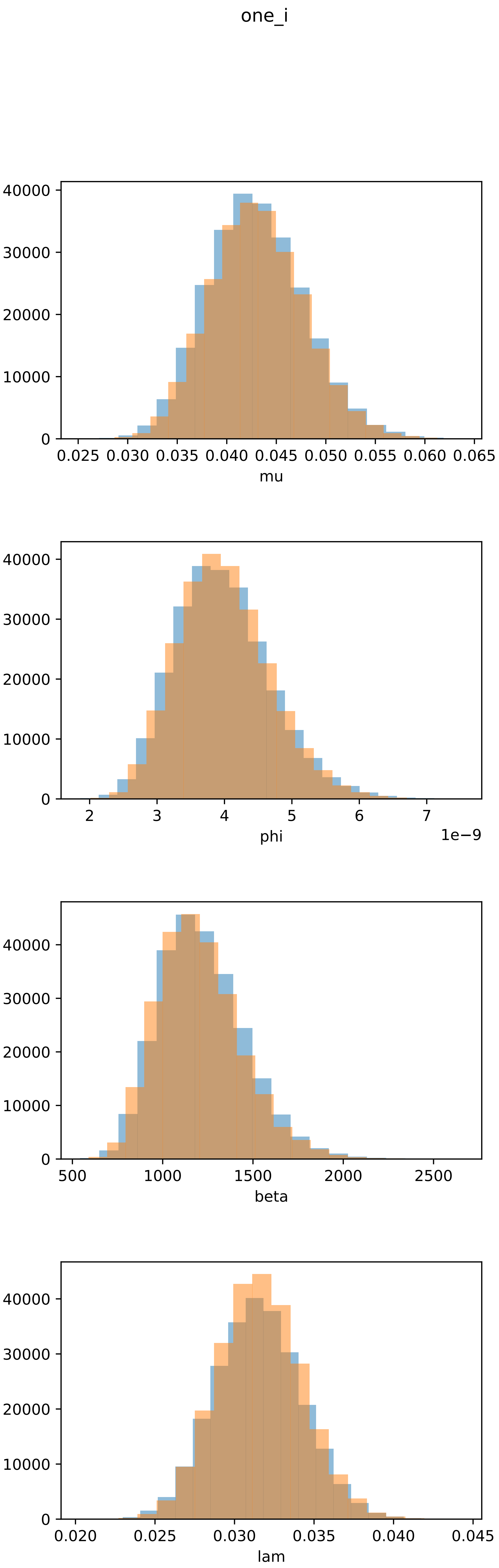

zero_i
phi
10^{-9}
6×10^{-10}
4×10^{-10}
1.4×10^{-2}
1.6×10^{-2}
1.8×10^{-2}
2×10^{-2}
2.2×10^{-2}
2.4×10^{-2}
mu
beta
4×10^{3}
3×10^{3}
2×10^{3}
10^{3}
1.4×10^{-2}
1.6×10^{-2}
1.8×10^{-2}
2×10^{-2}
2.2×10^{-2}
2.4×10^{-2}
mu
beta
4×10^{3}
3×10^{3}
2×10^{3}
10^{3}
4×10^{-10}
6×10^{-10}
10^{-9}
phi

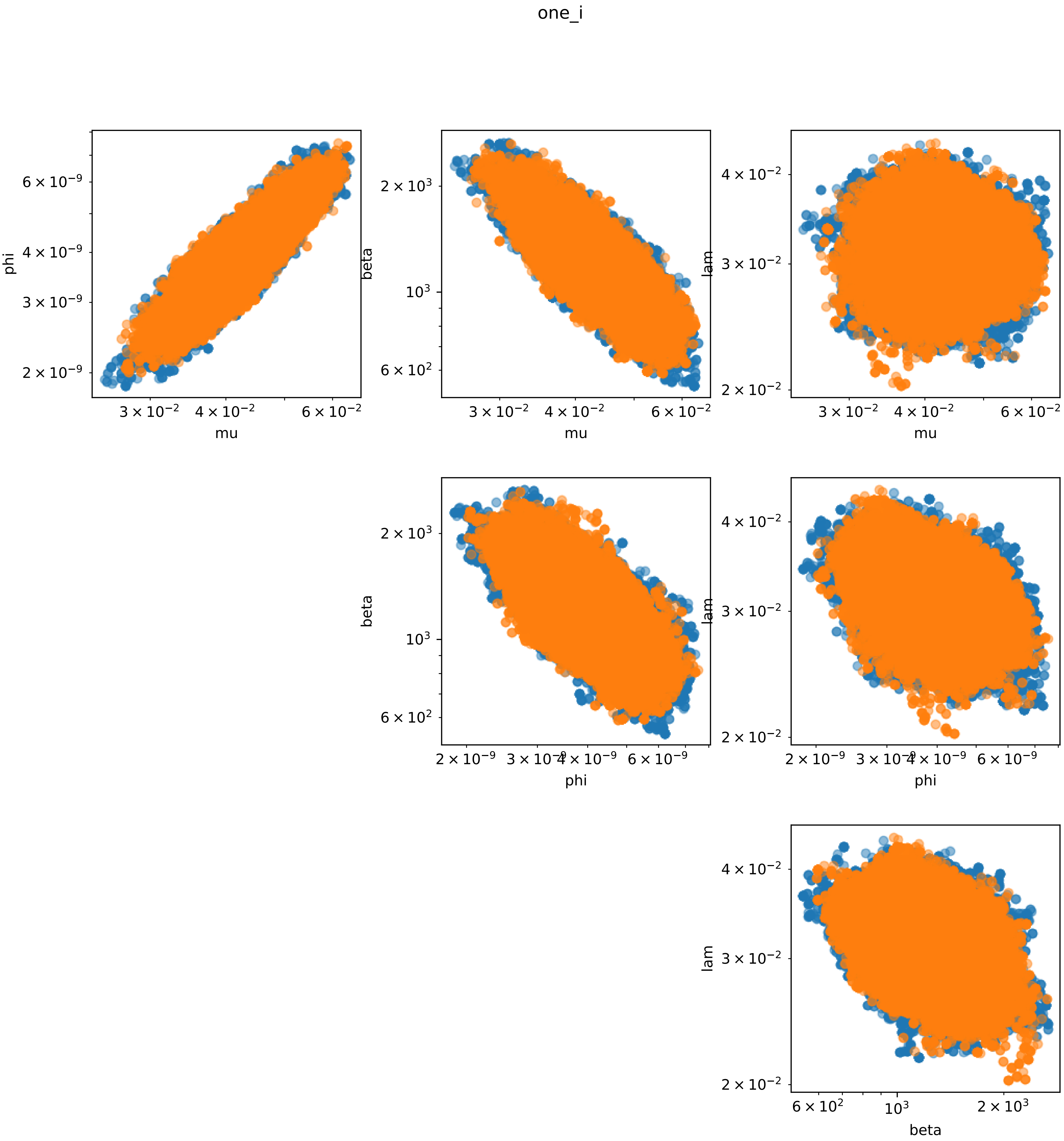

zero_i
120000
100000
80000
60000
40000
20000
0
frequency
76
78
80
82
84
86
88
90
chi

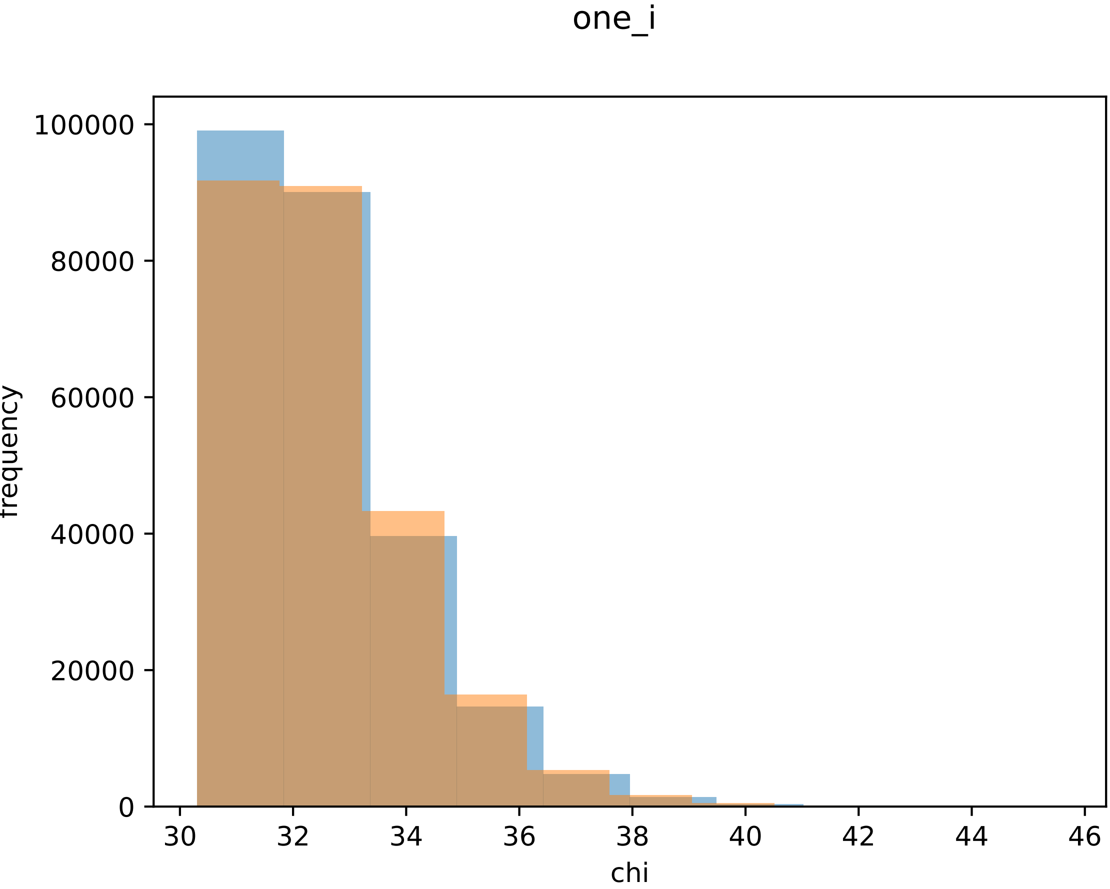
zero_i

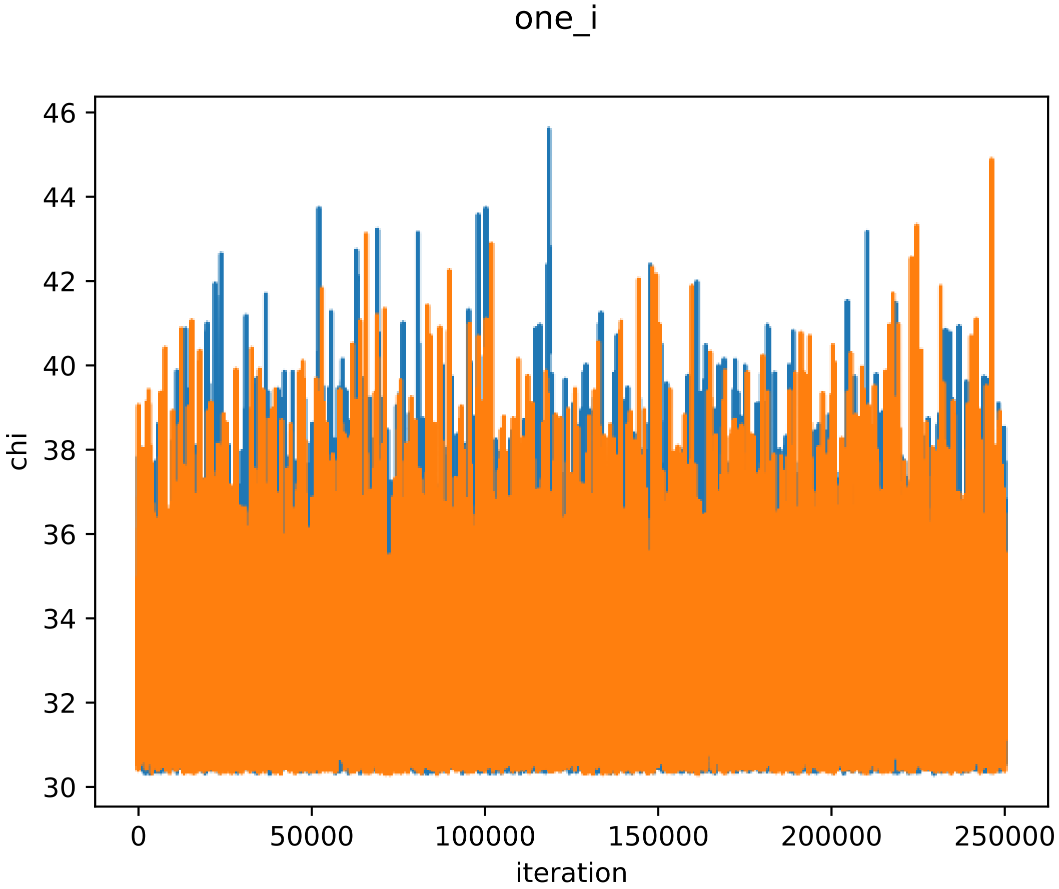


chi
90
88
86
84
82
80
78
76
iteration
0
50000
100000
150000
200000
250000

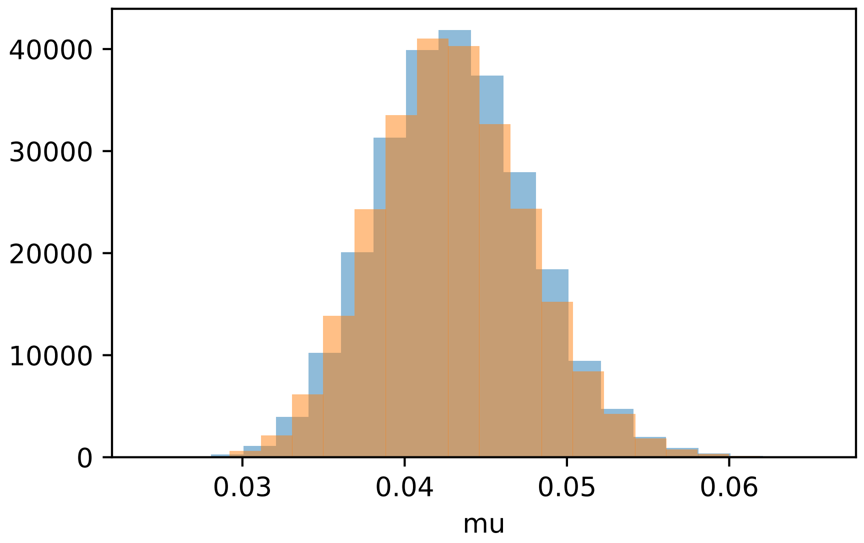

one_i
40000
30000
20000
10000
0
0.025
0.030
0.035
0.040
0.045
0.050
0.055
0.060
0.065
mu
40000
30000
20000
10000
0
2
3
4
5
6
7
1e−9
phi
40000
30000
20000
10000
0
500
1000
1500
2000
2500
beta
40000
30000
20000
10000
0
0.020
0.025
0.030
0.035
0.040
0.045
lam

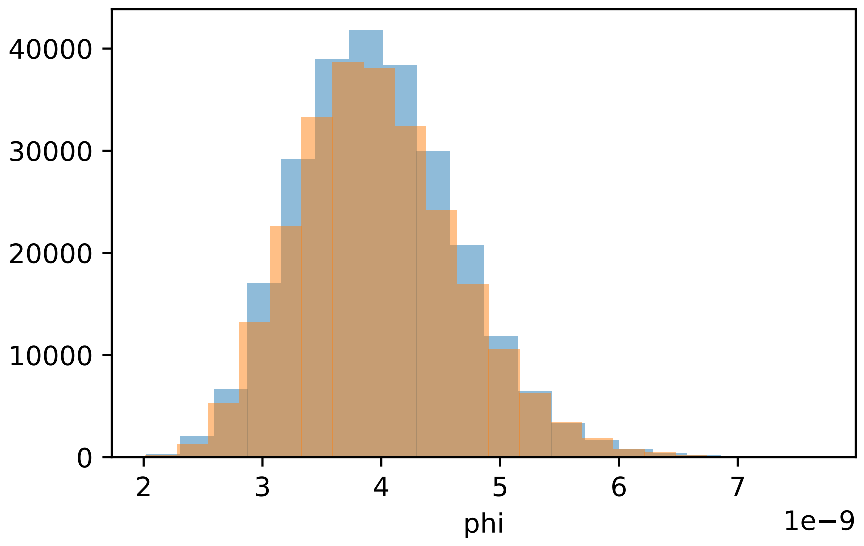

one_i
phi
mu
6×10^{-9}
4×10^{-9}
3×10^{-9}
2×10^{-9}
3×10^{-2}
4×10^{-2}
6×10^{-2}
beta
2×10^{3}
10^{3}
6×10^{2}
lam
2×10^{-2}

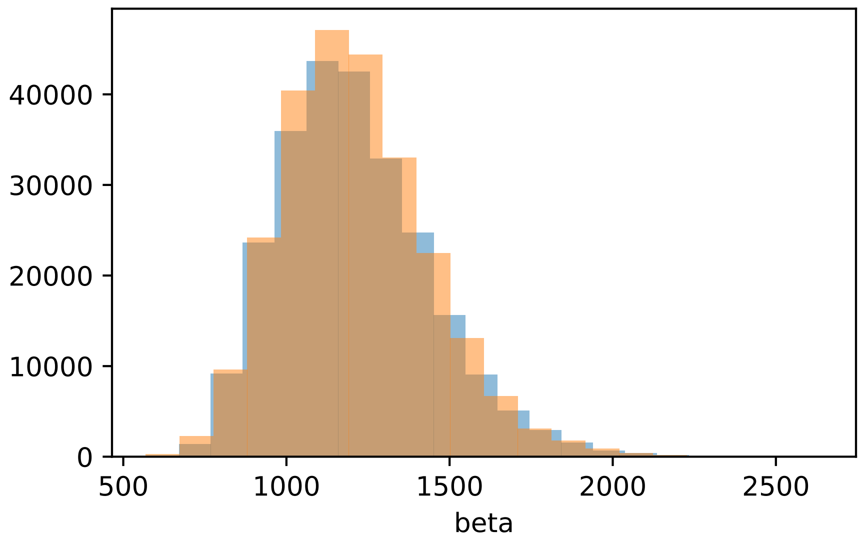

one_i
frequency
100000
80000
60000
40000
20000
0
30
32
34
36
38
40
42
44
46
chi

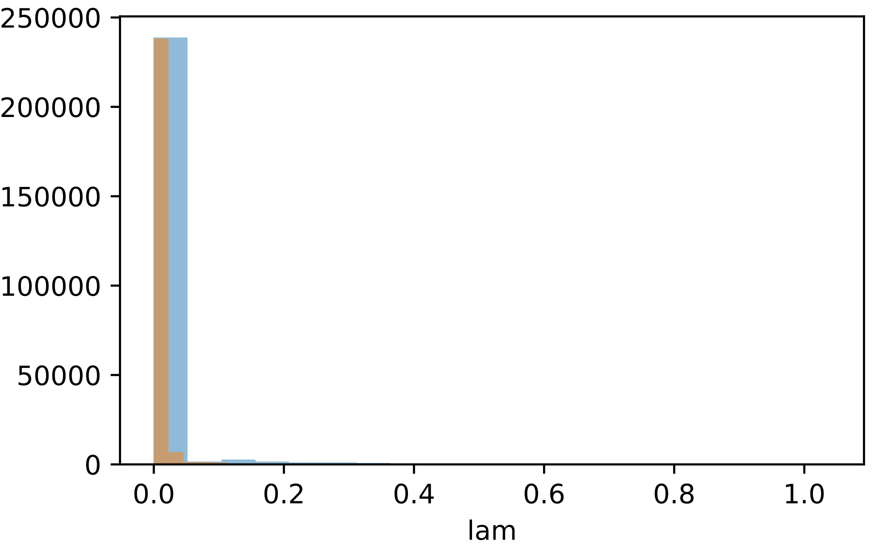

one_i
chi
iteration
46
44
42
40
38
36
34
32
30
0
50000
100000
150000
200000
250000

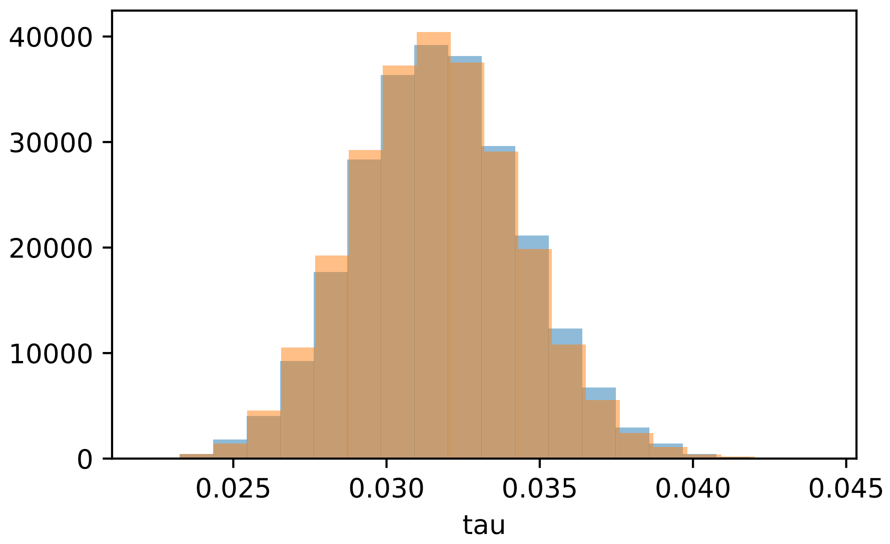
two_i


40000
30000
20000
10000
0
0.03
0.04
0.05
0.06
mu

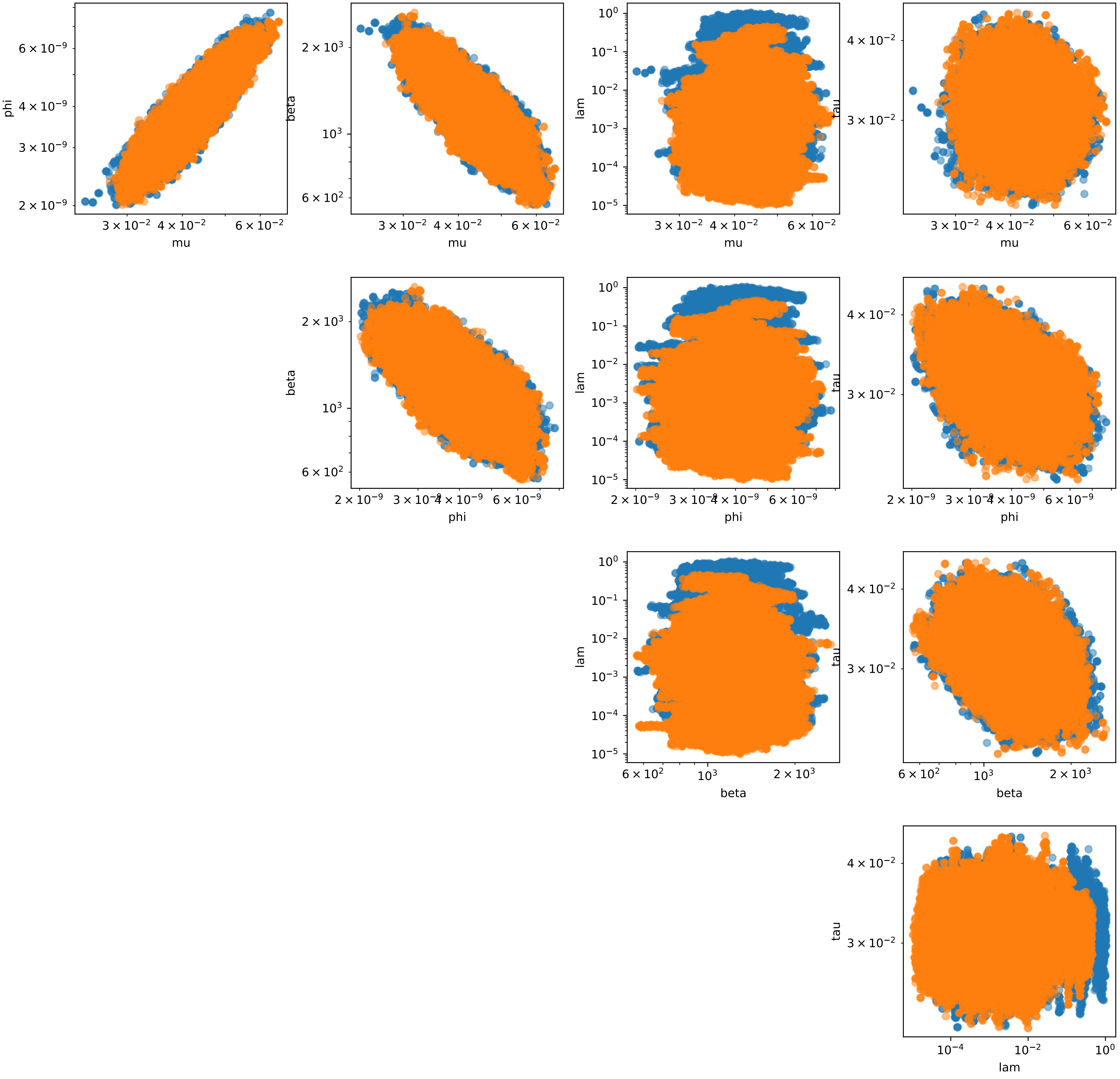

40000
30000
20000
10000
0
2
3
4
5
6
7
phi
1e−9


40000
30000
20000
10000
0
500
1000
1500
2000
2500
beta

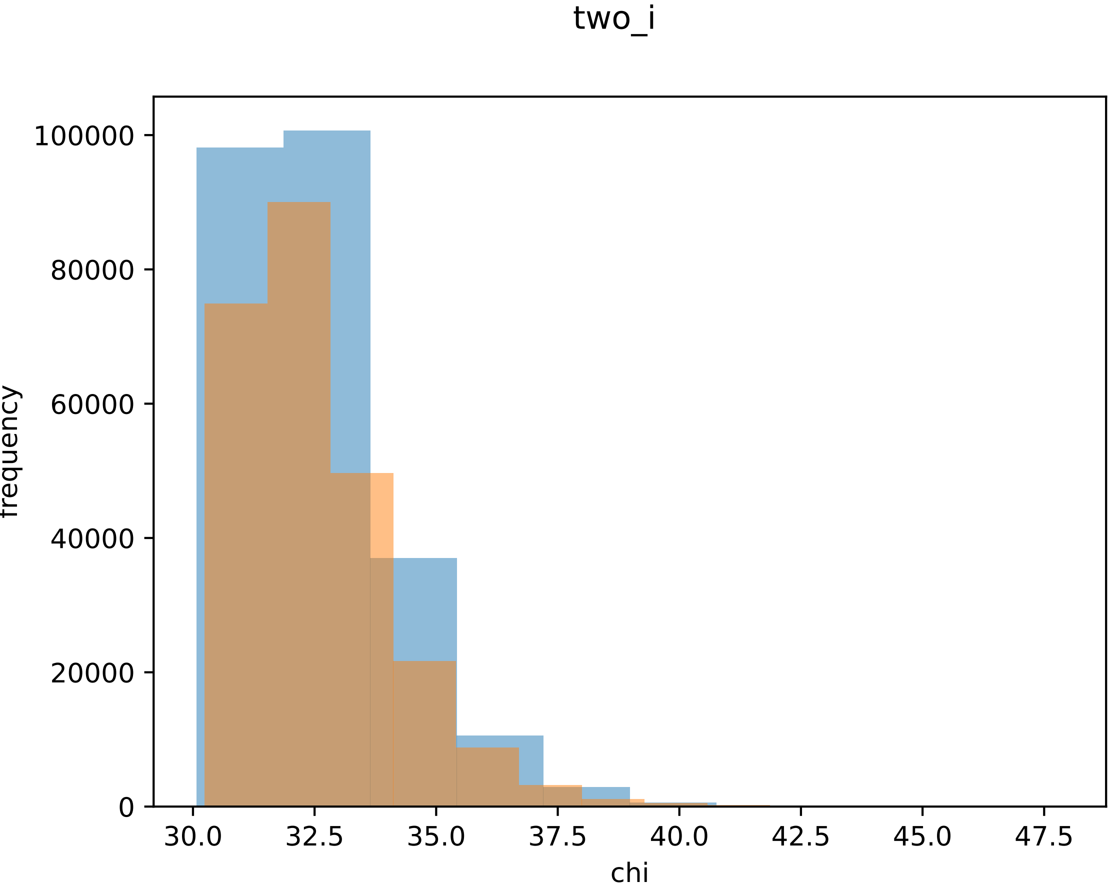

250000
200000
150000
100000
50000
0
0.0
0.2
0.4
0.6
0.8
1.0
lam

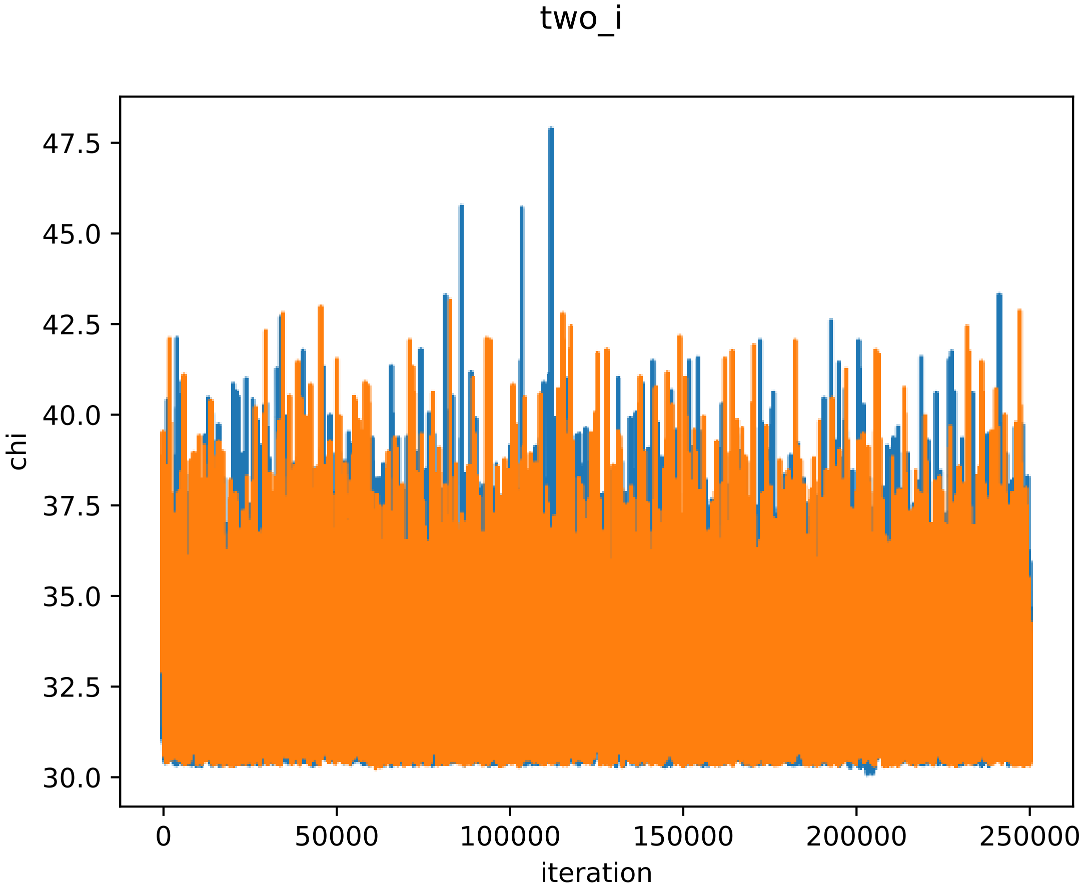

40000
30000
20000
10000
0
0.025
0.030
0.035
0.040
0.045
tau

two_i

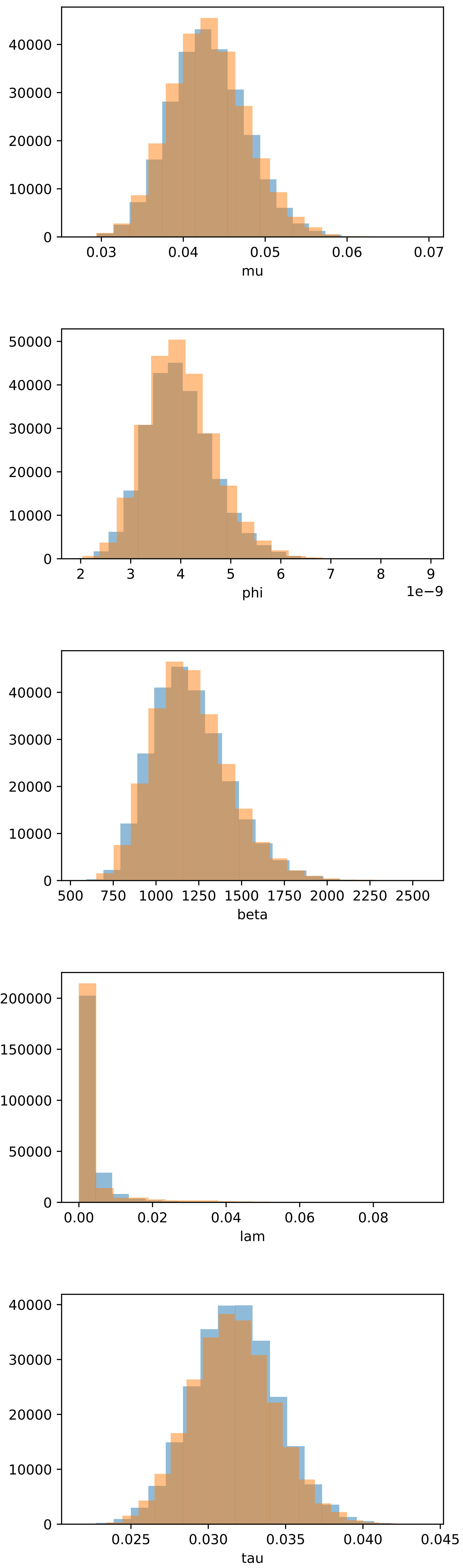


phi
beta
lam
tau
mu
6×10^{-9}
4×10^{-9}
3×10^{-9}
2×10^{-9}
2×10^{3}
10^{3}
6×10^{2}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
4×10^{-2}
3×10^{-2}
6×10^{-2}
10^{-4}
10^{-2}
10^{0}


two_i
frequency
100000
80000
60000
40000
20000
0
30.0
32.5
35.0
37.5
40.0
42.5
45.0
47.5
chi

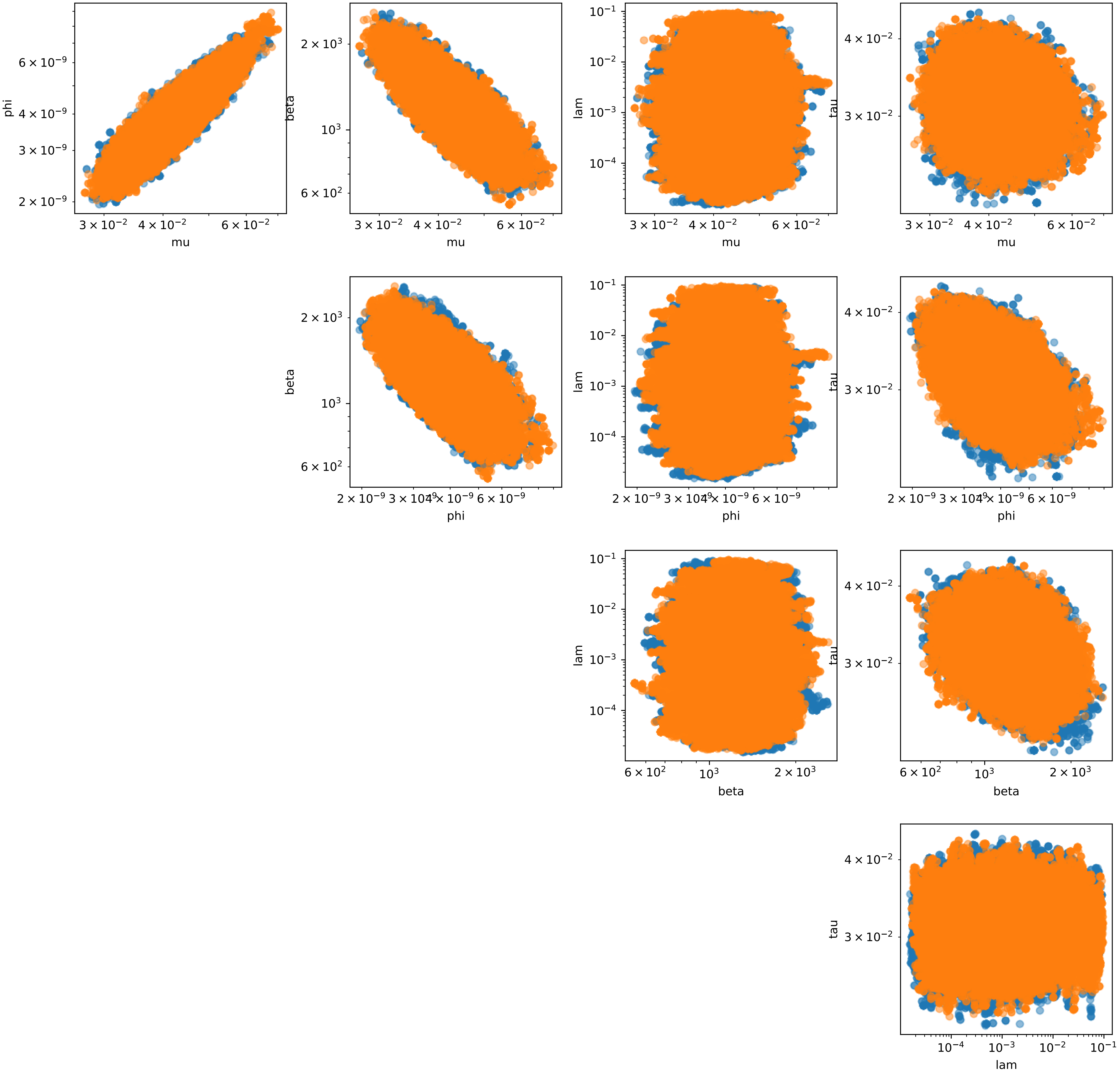
two_i
chi
47.5
45.0
42.5
40.0
37.5
35.0
32.5
30.0
iteration
0
50000
100000
150000
200000
250000

three_i



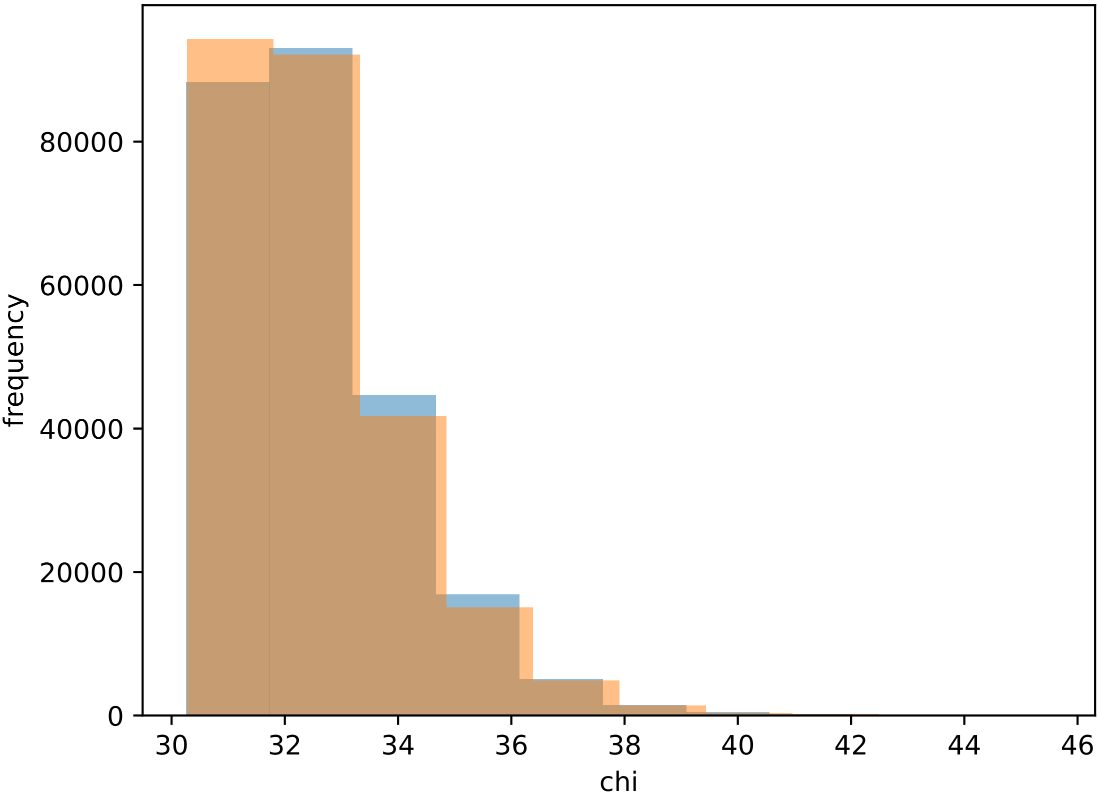
40000
30000
20000
10000
0
0.03
0.04
0.05
0.06
0.07
mu
50000
40000
30000
20000
10000
0
2
3
4
5
6
7
8
9
1e−9
phi
40000
30000
20000
10000
0
500
750
1000
1250
1500
1750
2000
2250
2500
beta
200000
150000
100000
50000
0
0.00
0.02
0.04
0.06
0.08
lam
40000
30000
20000
10000
0
0.025
0.030
0.035
0.040
0.045
tau

three_i

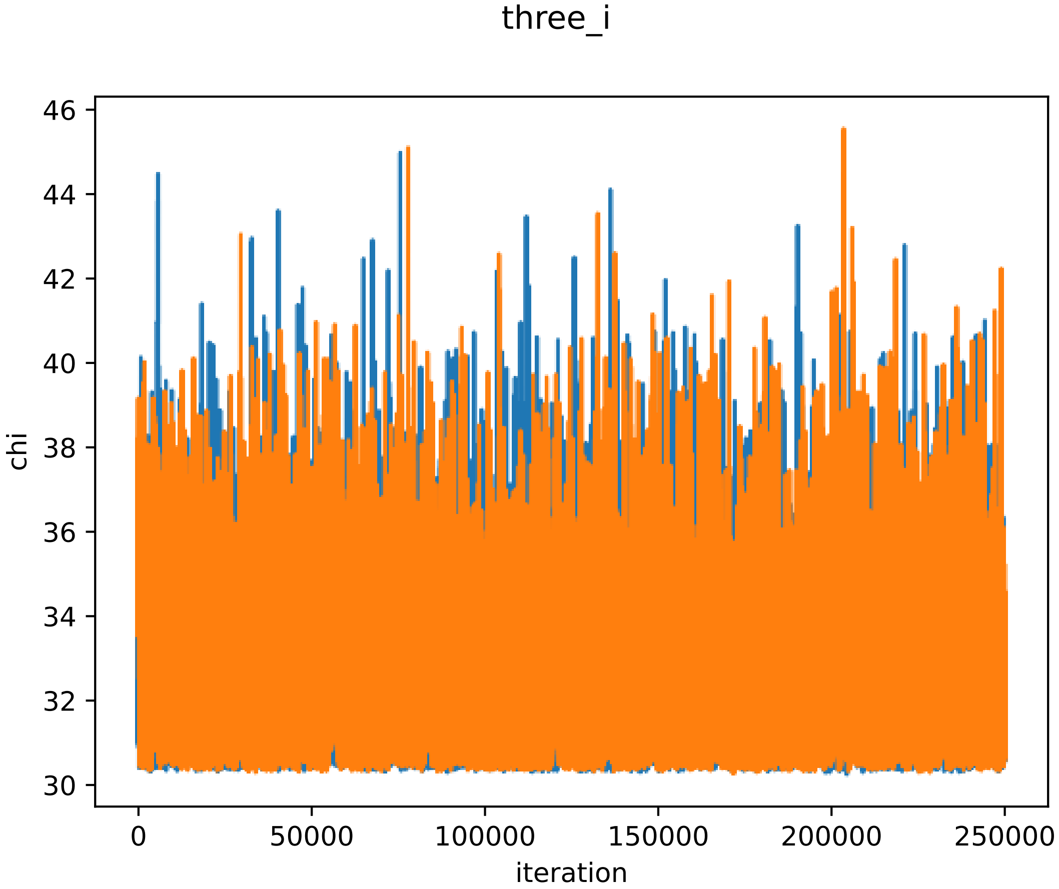


phi
mu
beta
lam
tau
6×10^{-9}
4×10^{-9}
3×10^{-9}
2×10^{-9}
3×10^{-2}
4×10^{-2}
6×10^{-2}
2×10^{3}
10^{3}
6×10^{2}
10^{-1}
10^{-2}
10^{-3}
10^{-4}

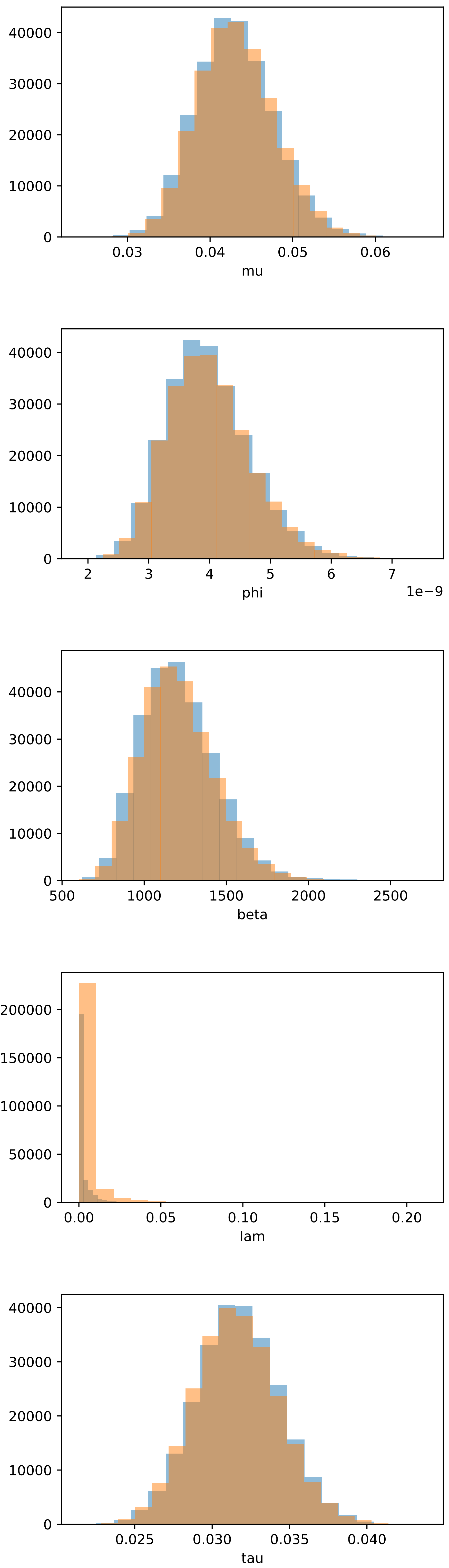
three_i

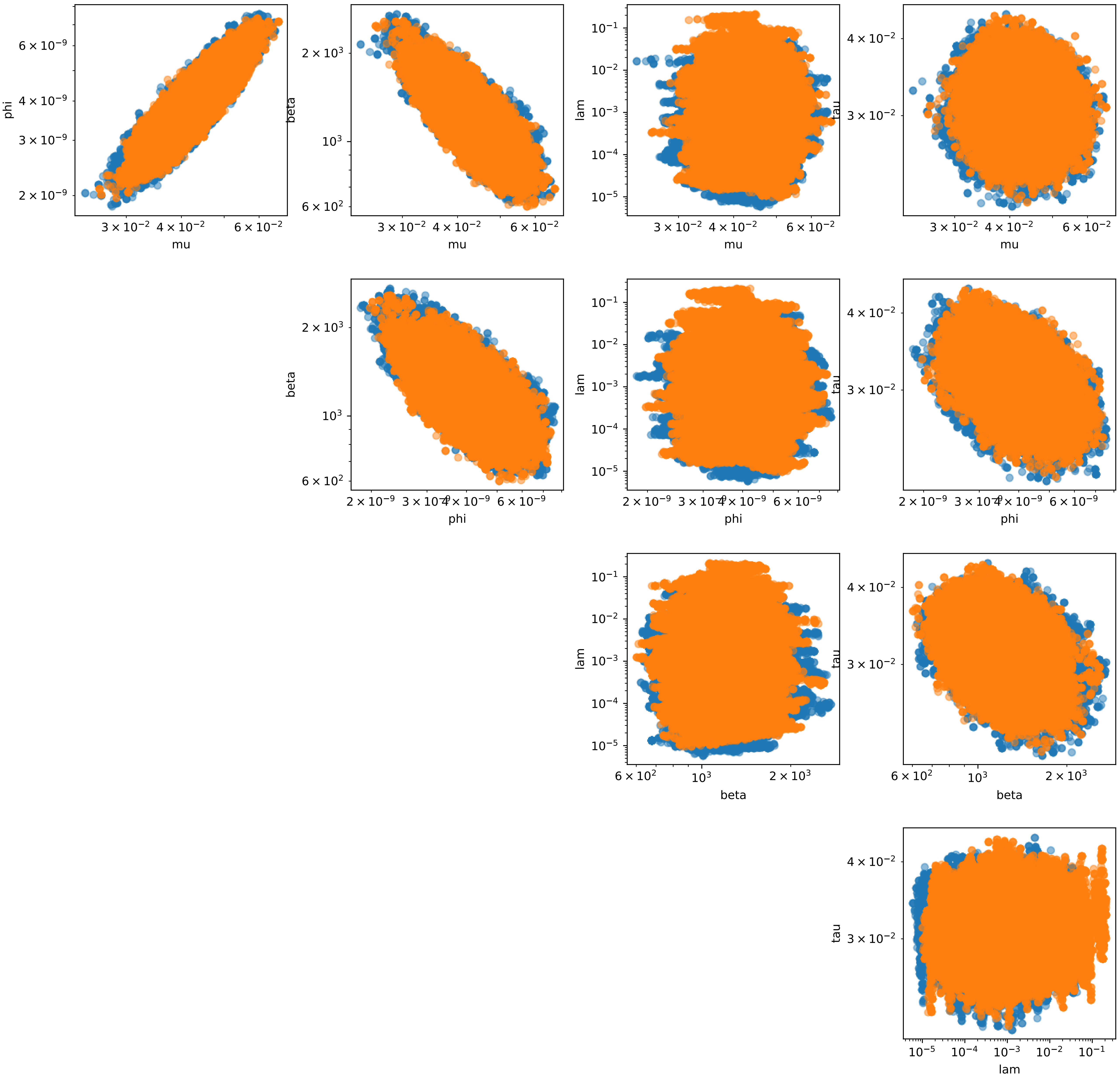


frequency
80000
60000
40000
20000
0
30
32
34
36
38
40
42
44
46
chi


three_i
chi
iteration
46
44
42
40
38
36
34
32
30
0
50000
100000
150000
200000
250000

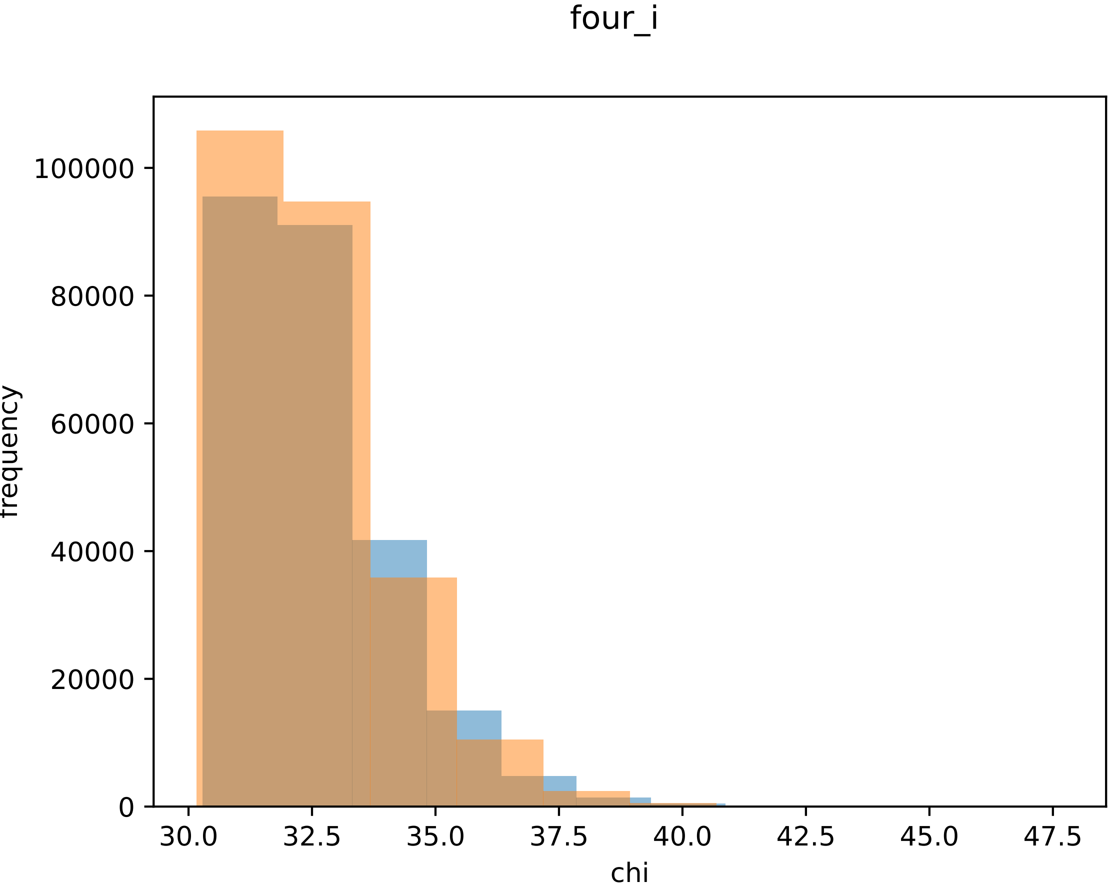
four_i

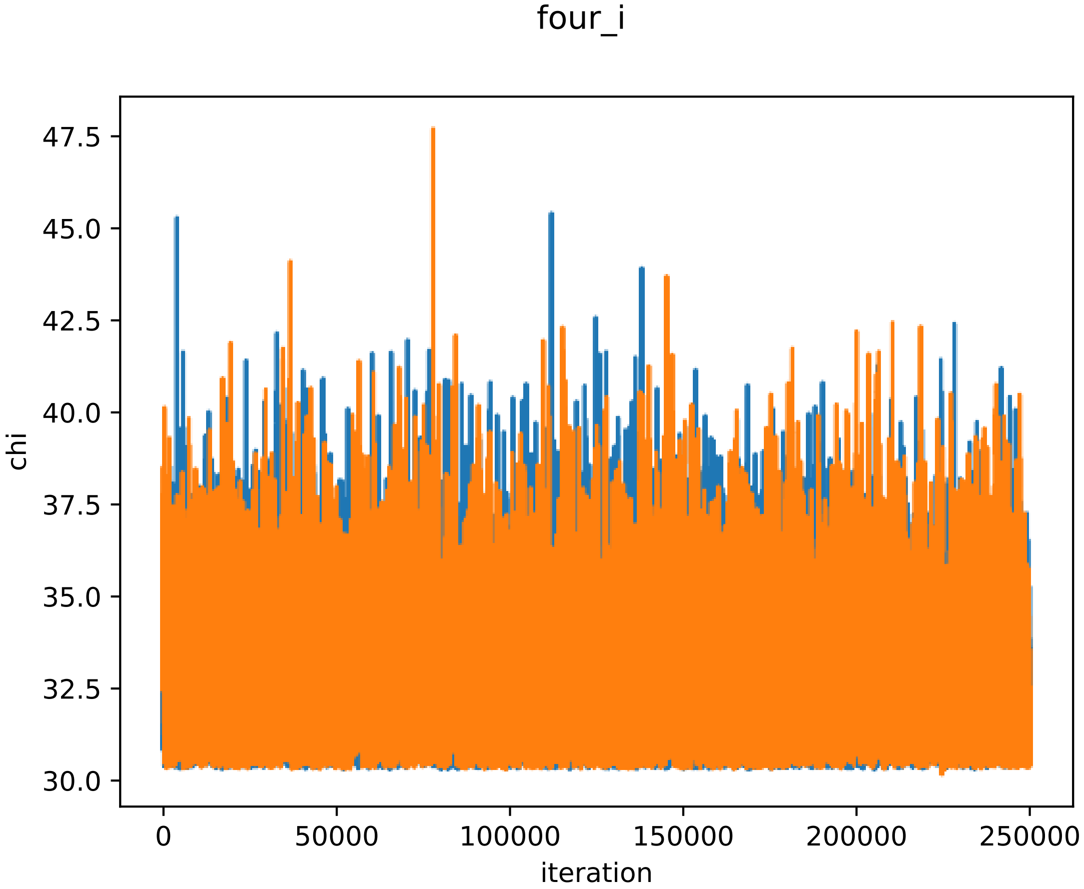

40000
30000
20000
10000
0
0.03
0.04
0.05
0.06
mu
40000
30000
20000
10000
0
2
3
4
5
6
7
phi
1e−9
40000
30000
20000
10000
0
500
1000
1500
2000
2500
beta
200000
150000
100000
50000
0
0.00
0.05
0.10
0.15
0.20
lam
40000
30000
20000
10000
0
0.025
0.030
0.035
0.040
tau



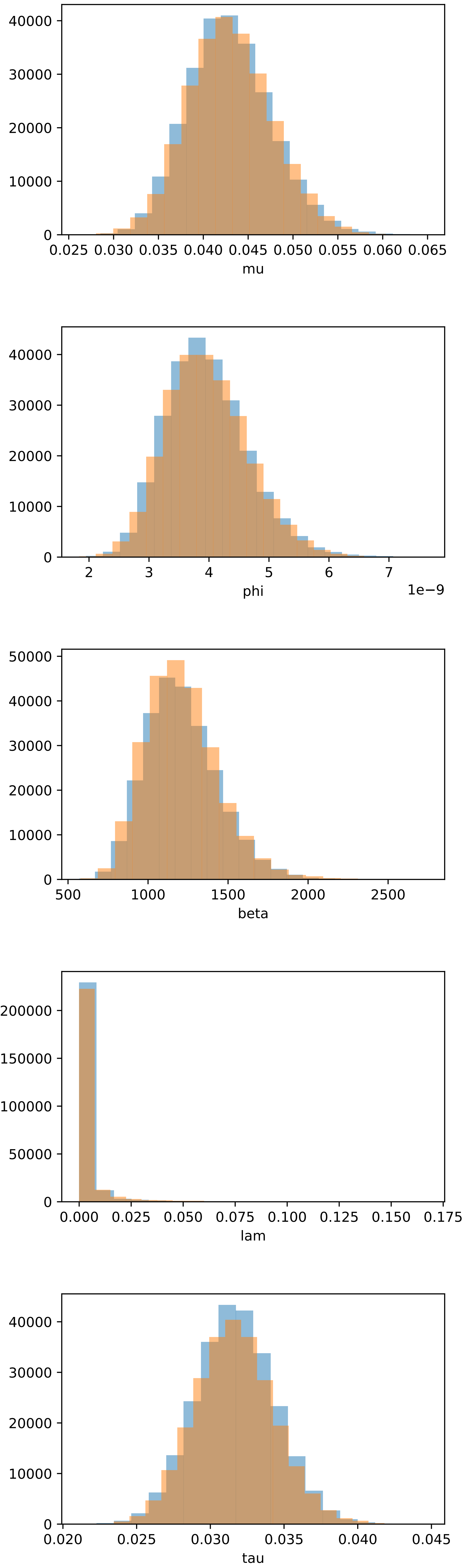
four_i

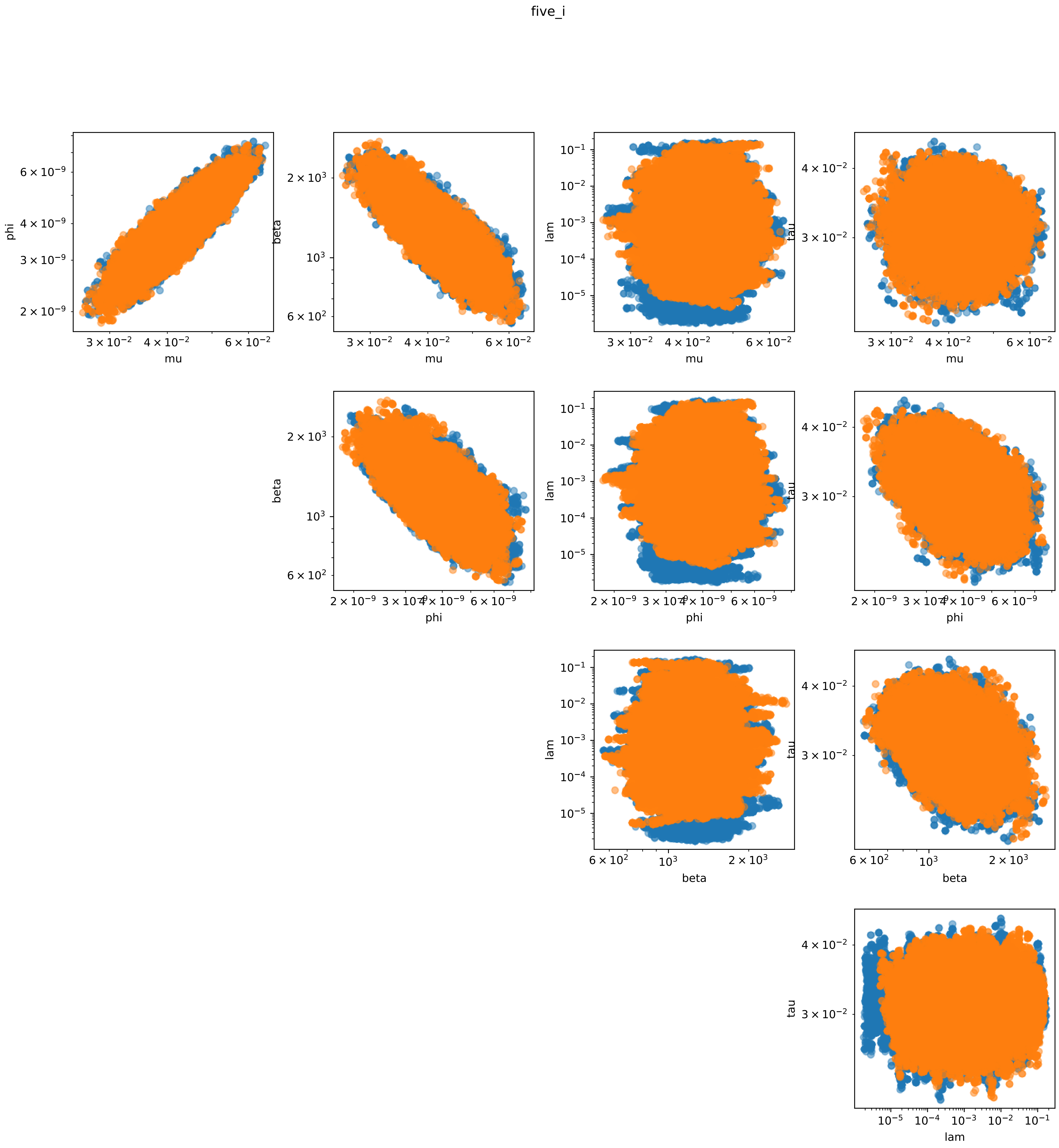
phi
mu
beta
lam
tau
6×10^{-9}
4×10^{-9}
3×10^{-9}
2×10^{-9}
3×10^{-2}
4×10^{-2}
6×10^{-2}
2×10^{3}
10^{3}
6×10^{2}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}

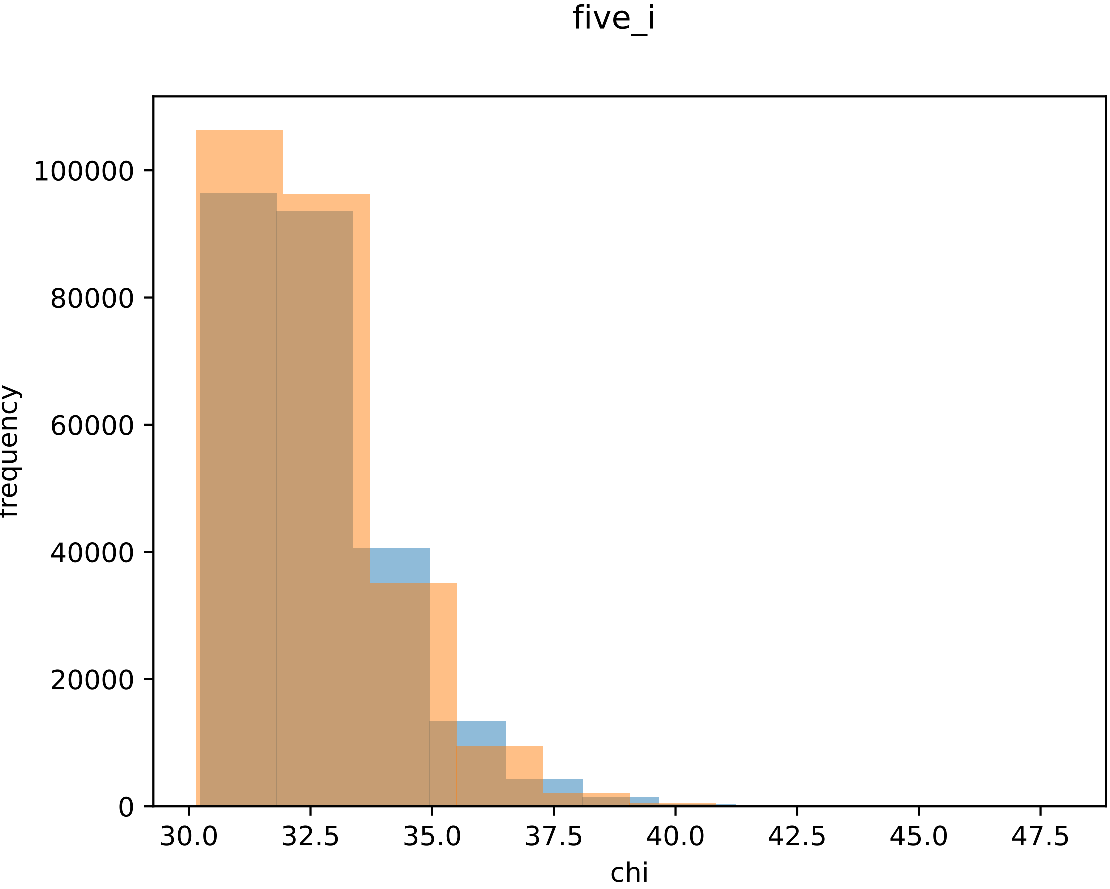

four_i
frequency
100000
80000
60000
40000
20000
0
30.0
32.5
35.0
37.5
40.0
42.5
45.0
47.5
chi

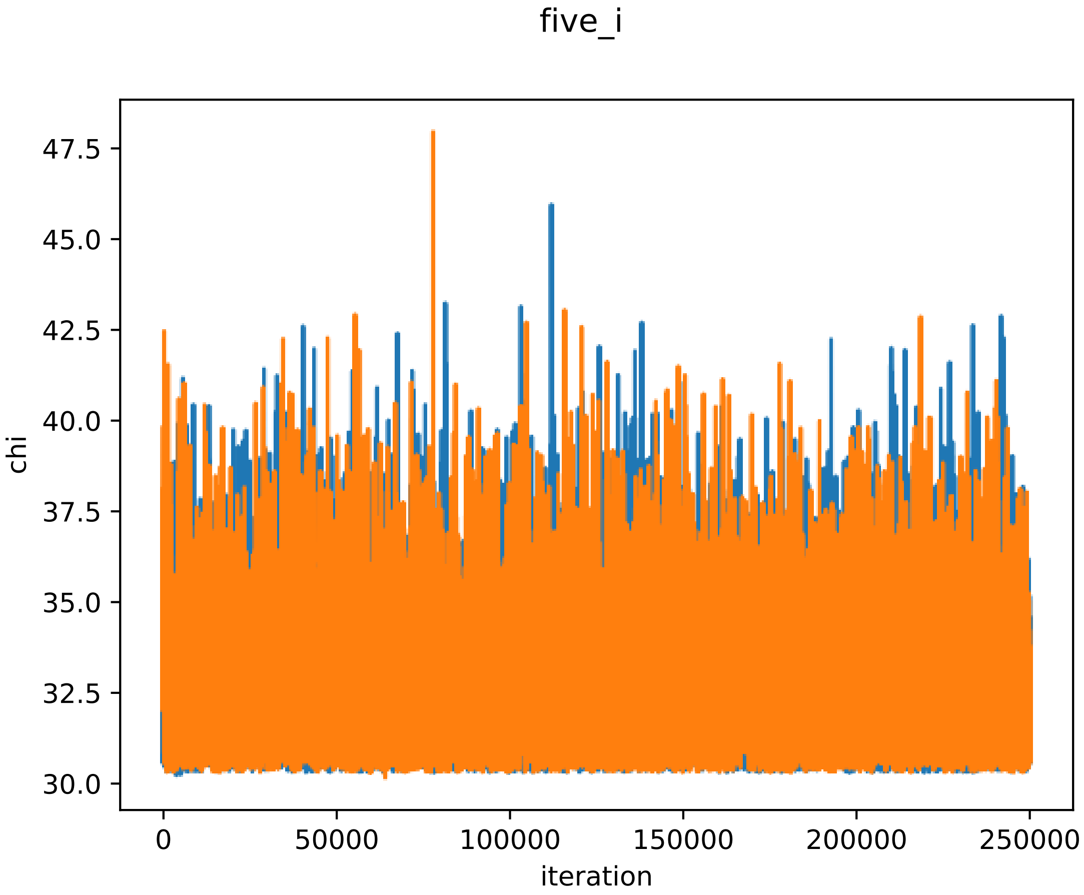

four_i
chi
iteration
47.5
45.0
42.5
40.0
37.5
35.0
32.5
30.0
0
50000
100000
150000
200000
250000

five_i


40000
30000
20000
10000
0
0.025
0.030
0.035
0.040
0.045
0.050
0.055
0.060
0.065
mu
40000
30000
20000
10000
0
2
3
4
5
6
7
phi
1e−9
50000
40000
30000
20000
10000
0
500
1000
1500
2000
2500
beta
200000
150000
100000
50000
0
0.000
0.025
0.050
0.075
0.100
0.125
0.150
0.175
lam
40000
30000
20000
10000
0
0.020
0.025
0.030
0.035
0.040
0.045
tau


five_i
phi
6×10^{-9}
4×10^{-9}
3×10^{-9}
2×10^{-9}
beta
2×10^{3}
10^{3}
6×10^{2}
lam
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
tau
4×10^{-2}
3×10^{-2}
mu
3×10^{-2}
4×10^{-2}
6×10^{-2}
phi
2×10^{-9}
3×10^{-9}
4×10^{-9}
6×10^{-9}
beta
6×10^{2}
10^{3}
2×10^{3}
lam
10^{-5}
10^{-4}
10^{-3}
10^{-2}
10^{-1}


five_i
frequency
100000
80000
60000
40000
20000
0
30.0
32.5
35.0
37.5
40.0
42.5
45.0
47.5
chi


five_i
chi
47.5
45.0
42.5
40.0
37.5
35.0
32.5
30.0
0
50000
100000
150000
200000
250000
iteration