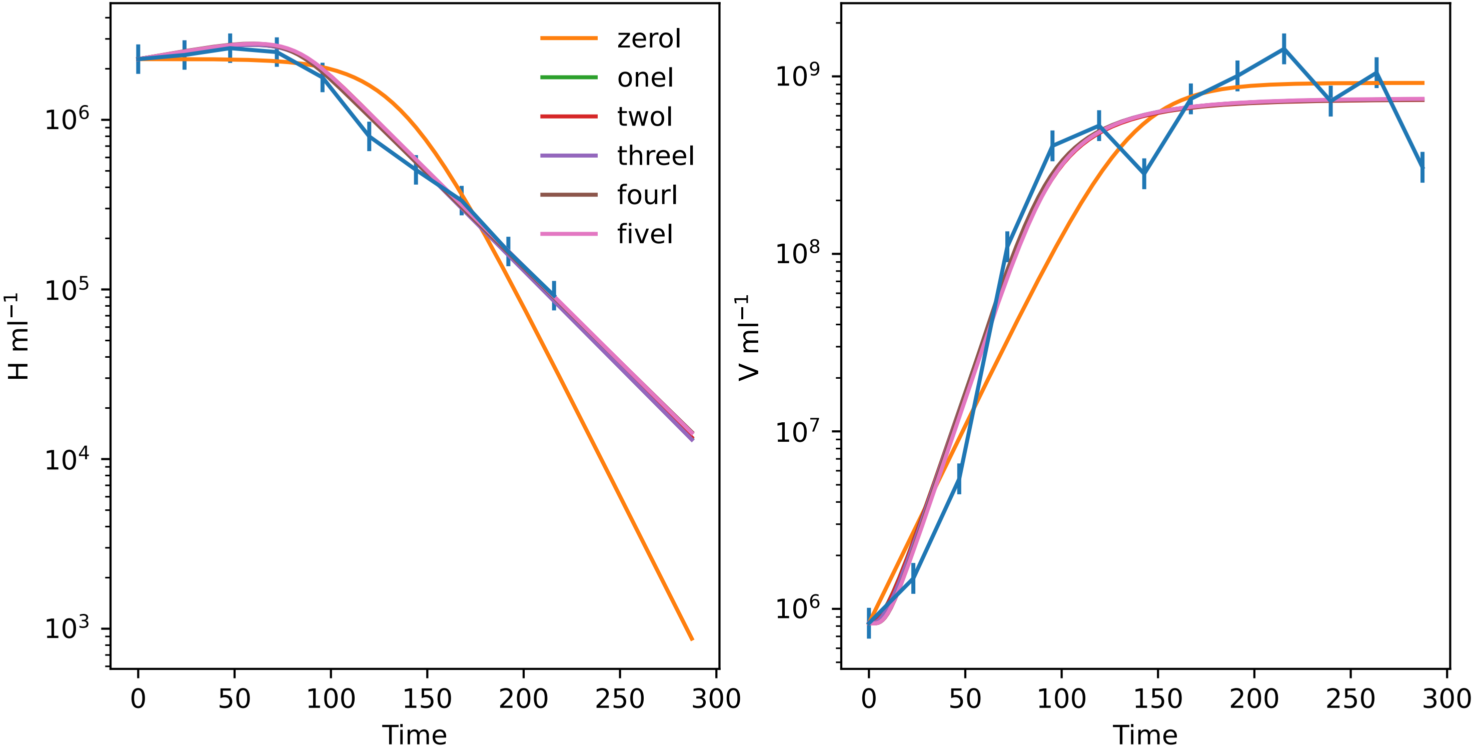
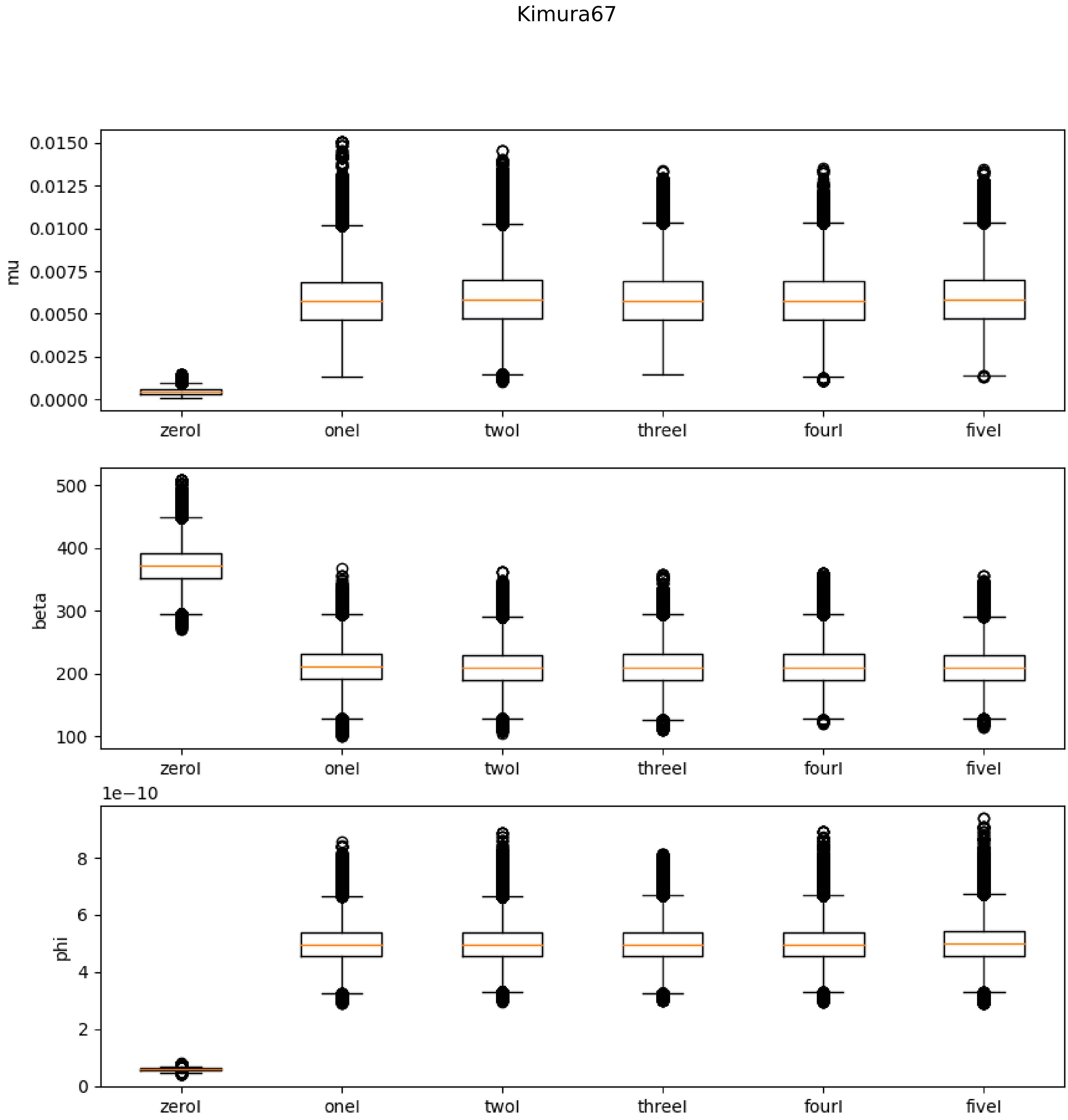
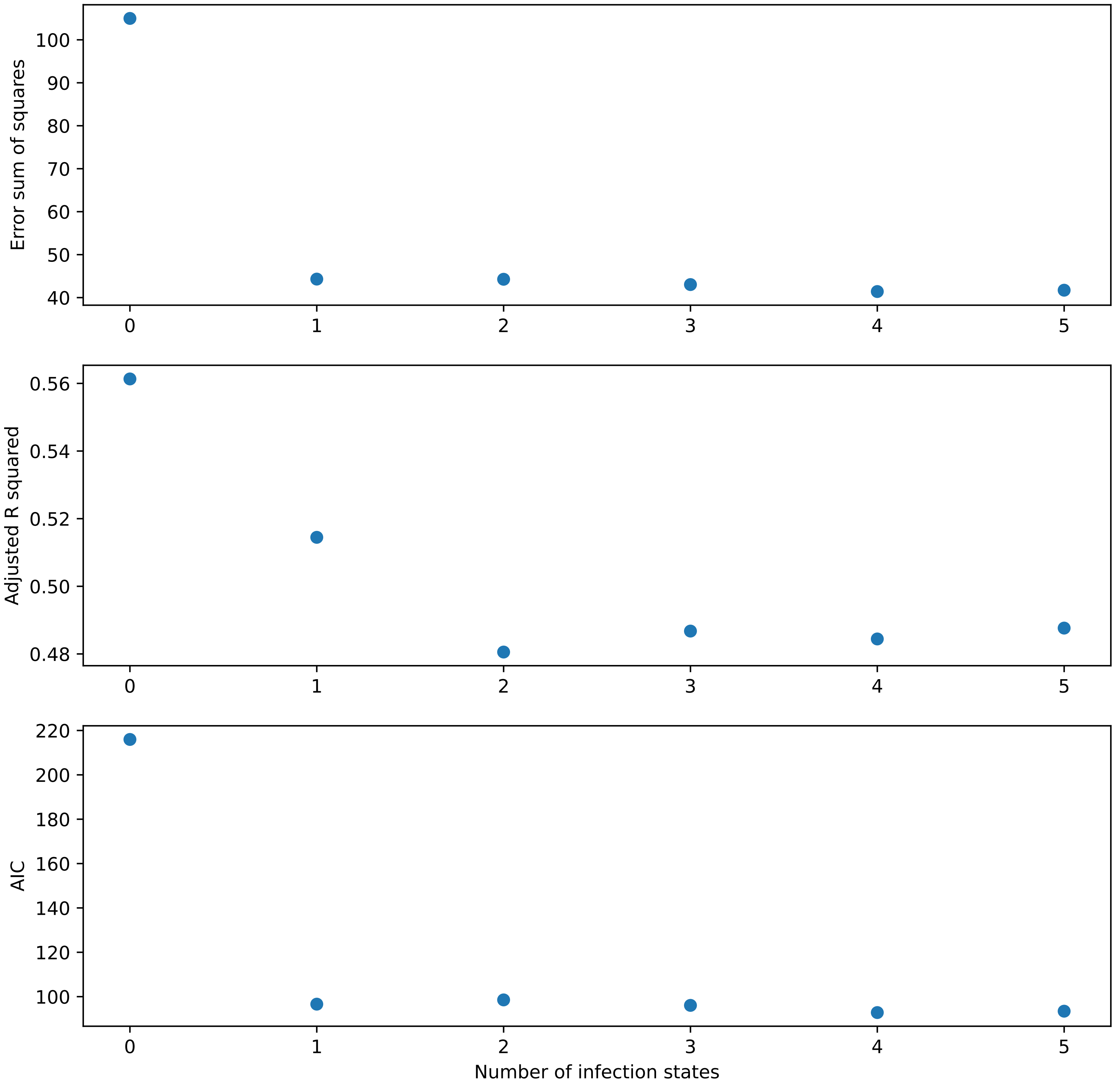
Kimura67

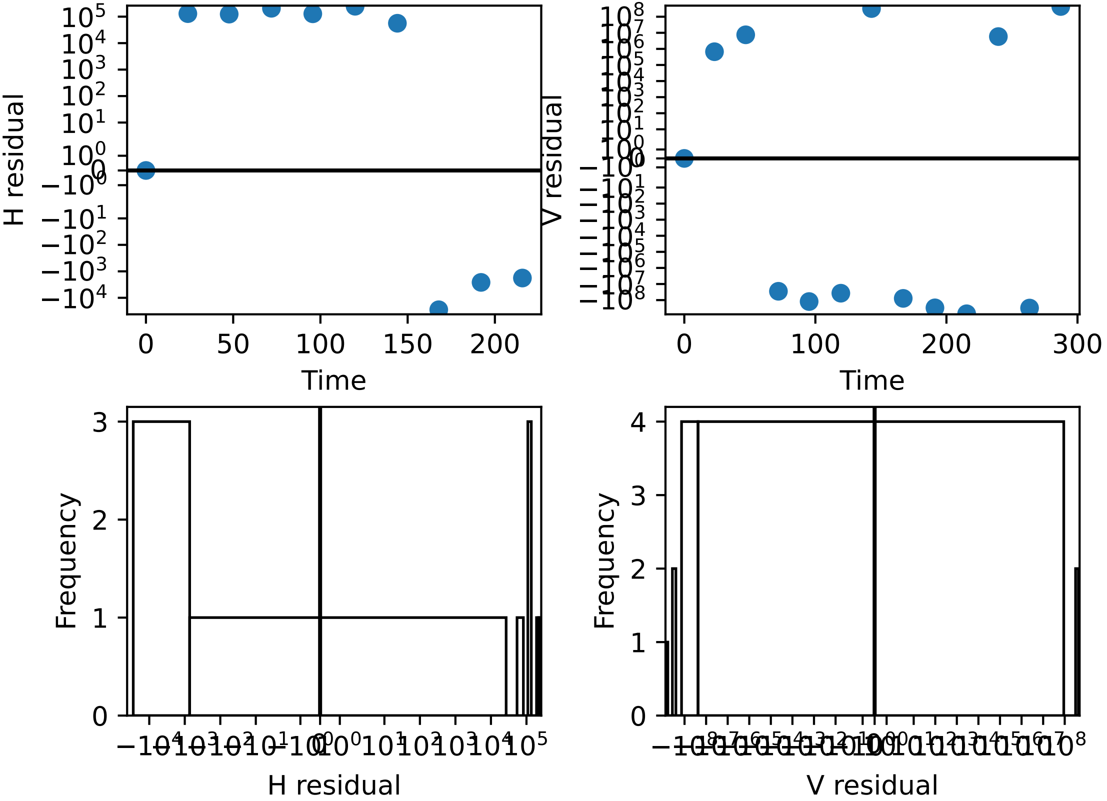


zerol
onel
twol
threel
fourl
fivel
H ml⁻¹
10^6
10^5
10^4
10^3
0
50
100
150
200
250
300
Time
V ml⁻¹
10^9
10^8
10^7
10^6
0
50
100
150
200
250
300
Time


Kimura67
mu
0.0150
0.0125
0.0100
0.0075
0.0050
0.0025
0.0000
beta
500
400
300
200
100
1e−10
phi
8
6
4
2
0
zeroI
oneI
twoI
threeI
fourI
fiveI

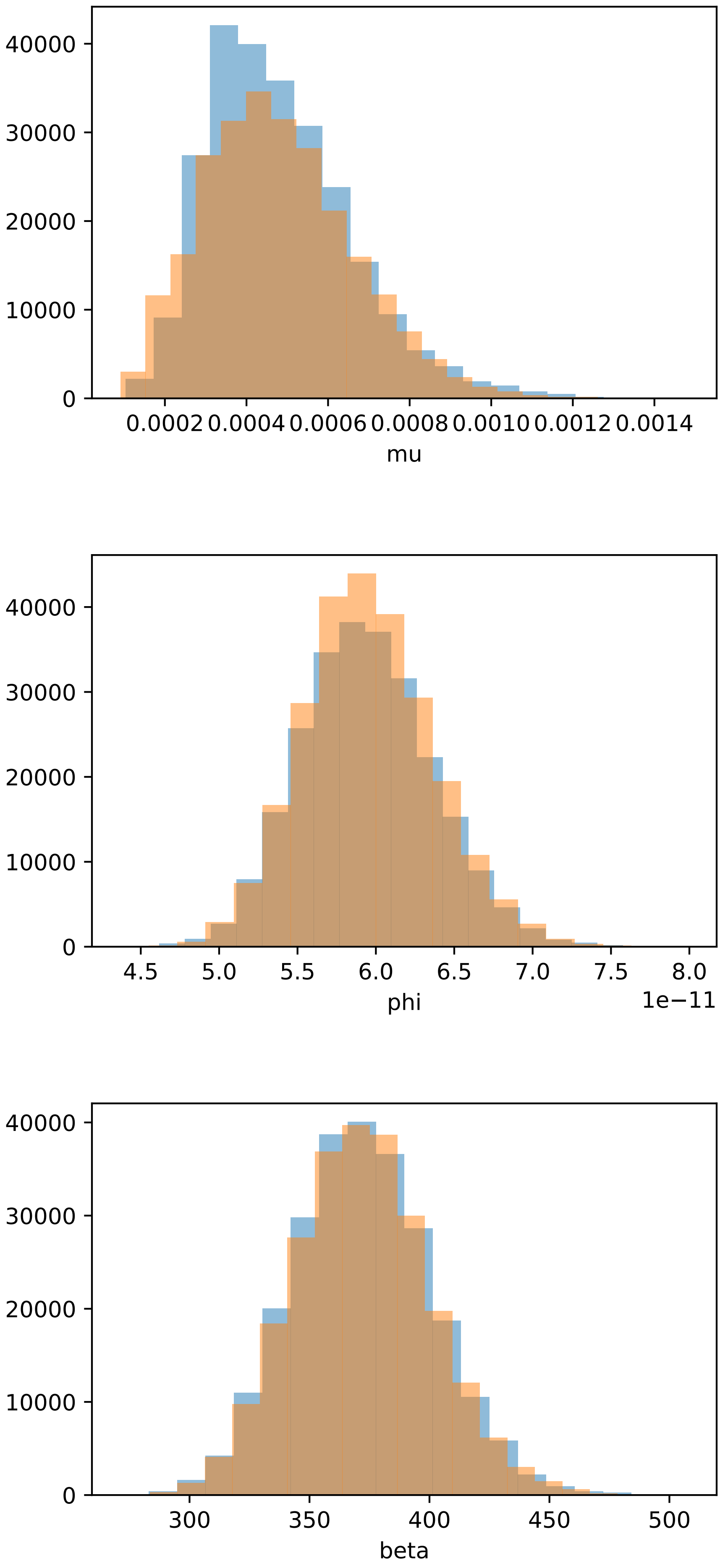
Kimura67


Error sum of squares
100
90
80
70
60
50
40
0
1
2
3
4
5
Adjusted R squared
0.56
0.54
0.52
0.50
0.48
0
1
2
3
4
5
AIC
220
200
180
160
140
120
100
0
1
2
3
4
5
Number of infection states

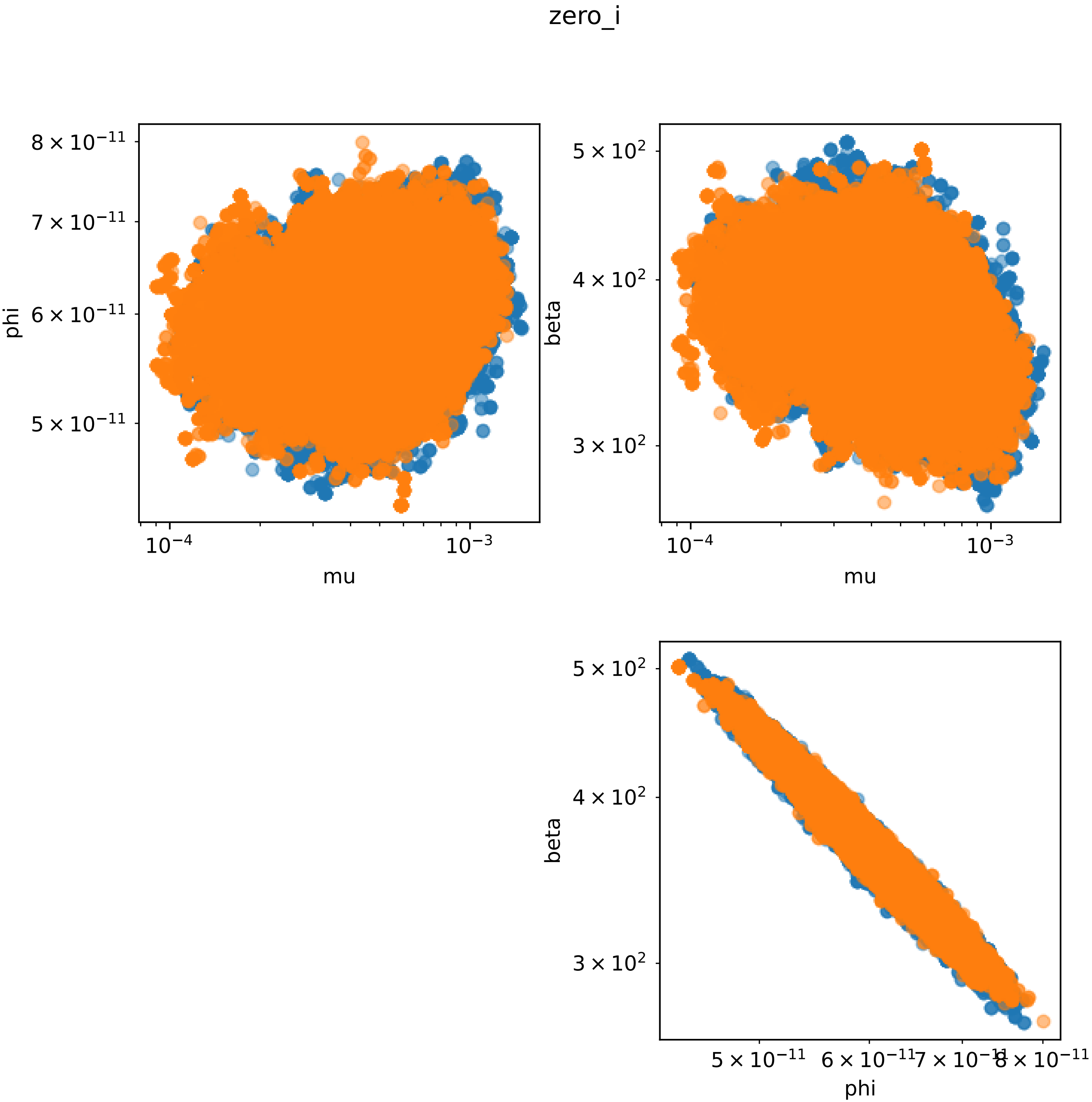


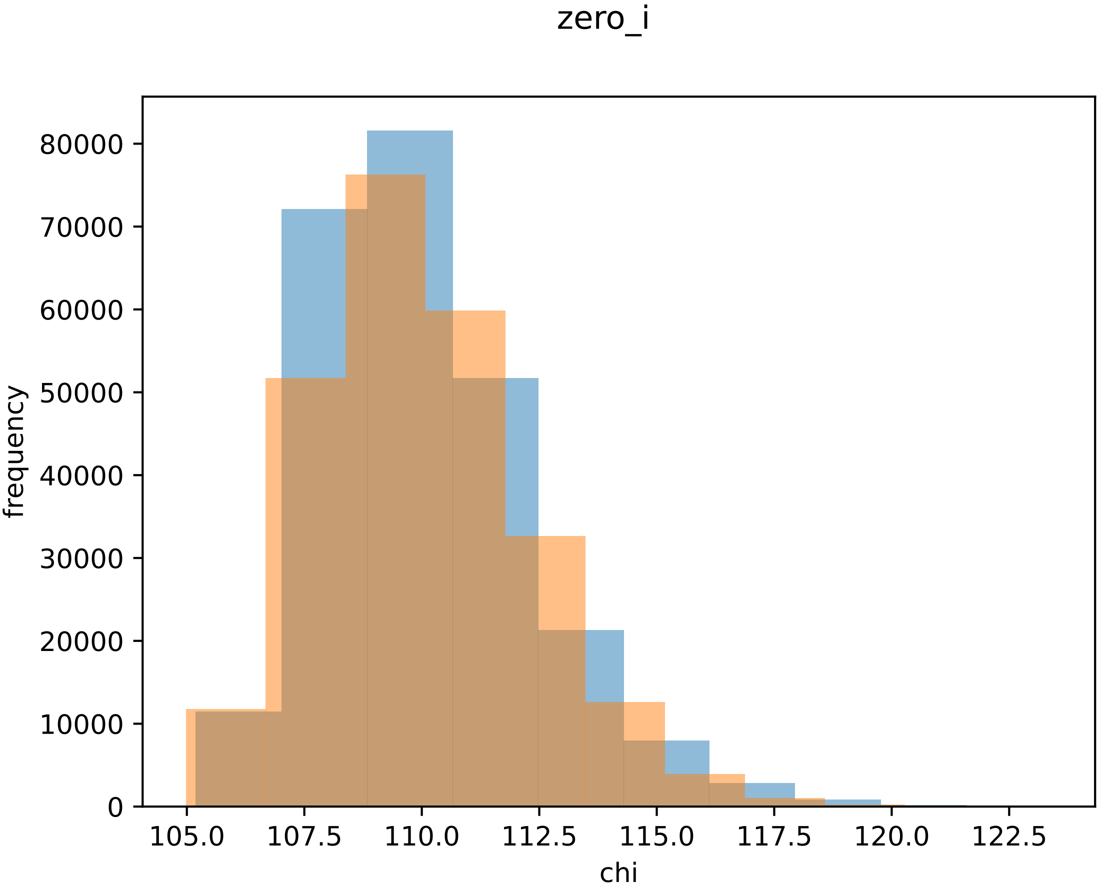
Residuals for model with lowest AIC

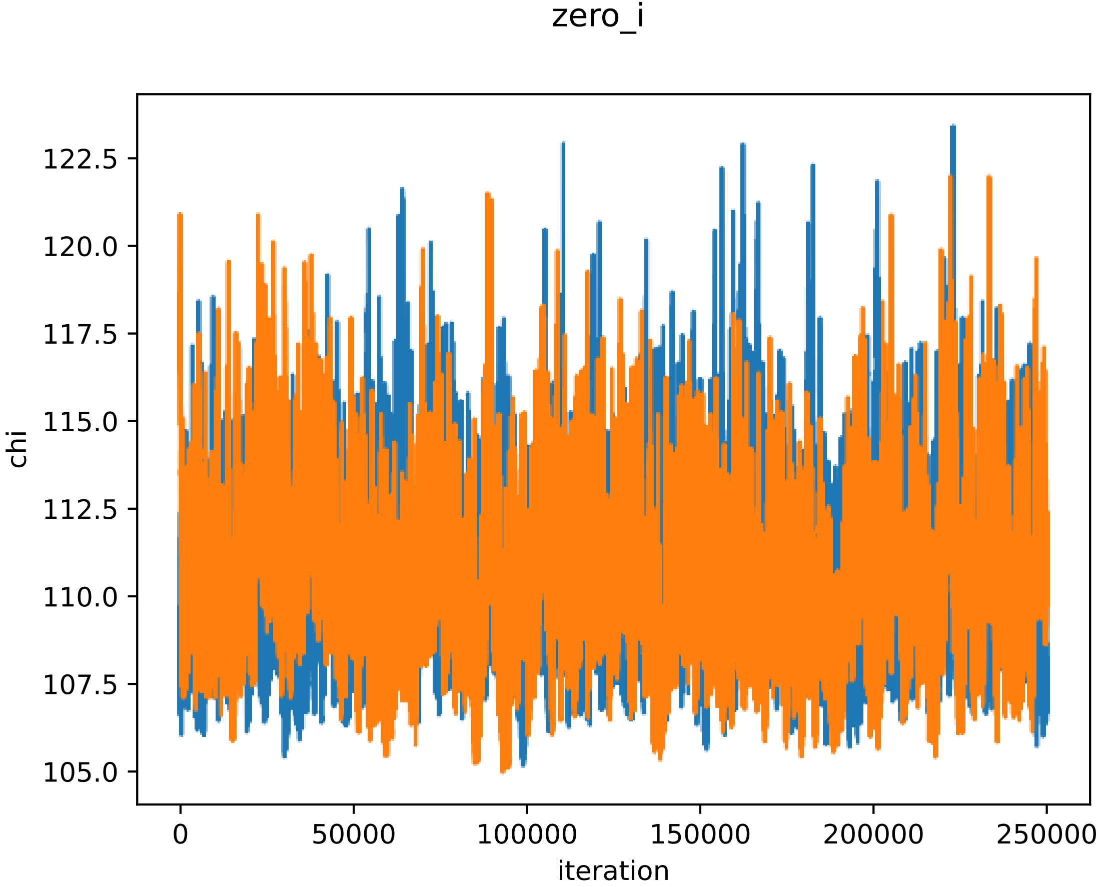
zero_i

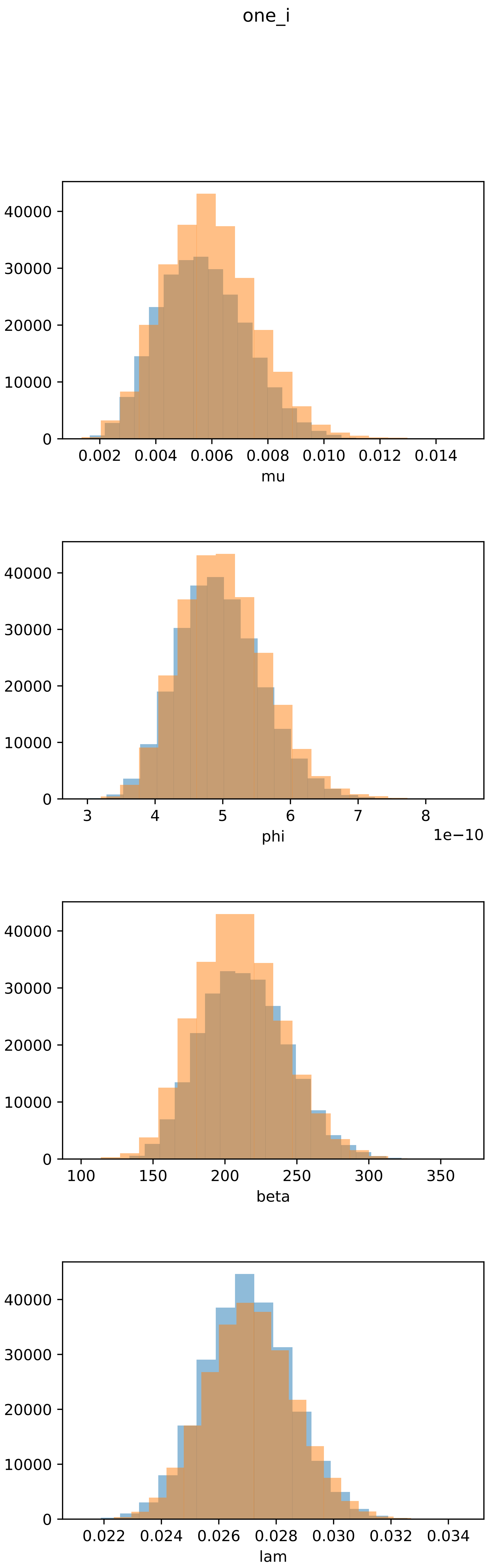


40000
30000
20000
10000
0
0.0002
0.0004
0.0006
0.0008
0.0010
0.0012
0.0014
mu
40000
30000
20000
10000
0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
1e−11
phi
40000
30000
20000
10000
0
300
350
400
450
500
beta

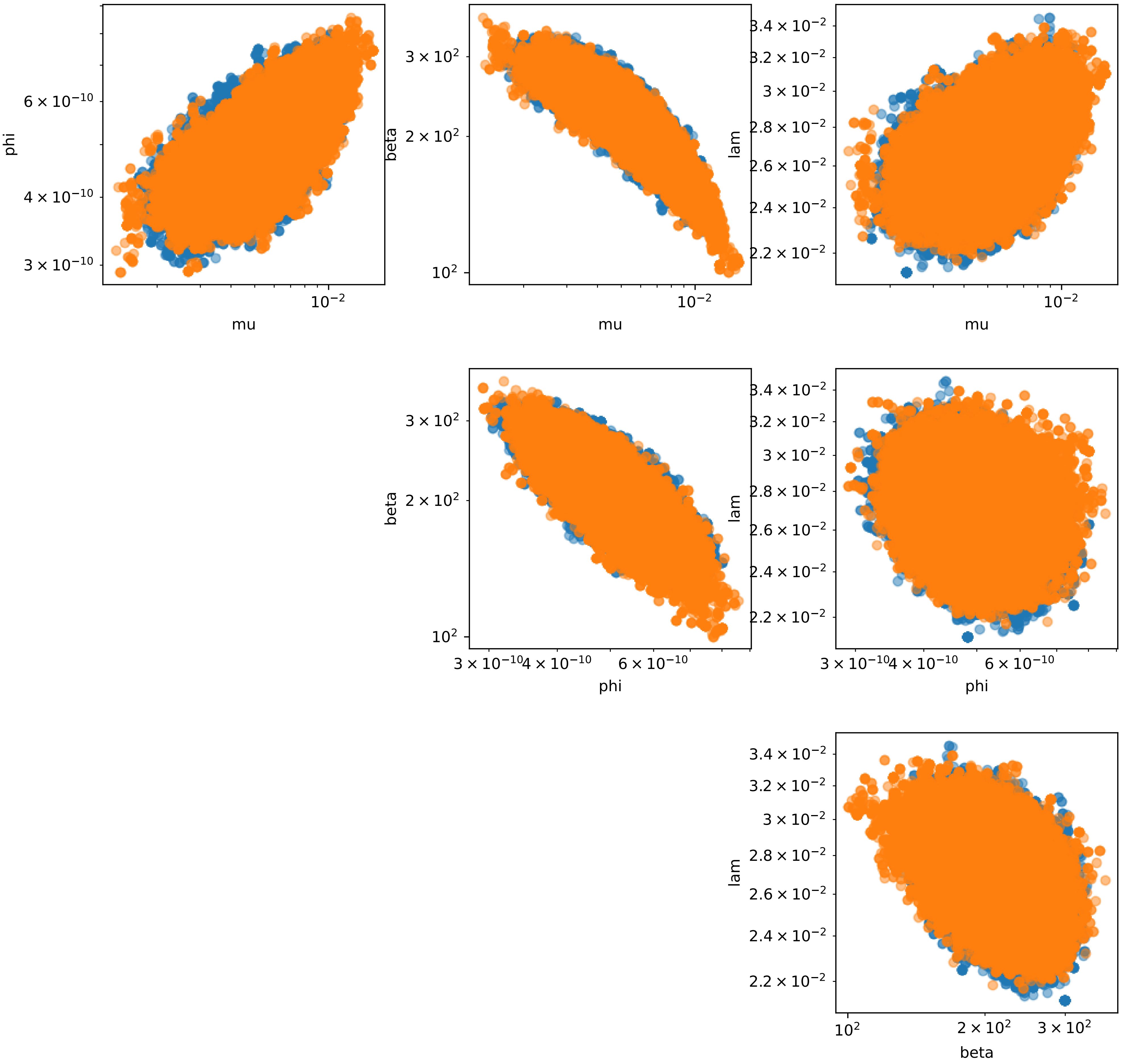

zero_i
phi
8×10^{-11}
7×10^{-11}
6×10^{-11}
5×10^{-11}
10^{-4}
10^{-3}
mu
beta
5×10^{2}
4×10^{2}
3×10^{2}
10^{-4}
10^{-3}
mu
beta
5×10^{2}
4×10^{2}
3×10^{2}
5×10^{-11}
6×10^{-11}
7×10^{-11}
8×10^{-11}
phi


zero_i
frequency
80000
70000
60000
50000
40000
30000
20000
10000
0
105.0
107.5
110.0
112.5
115.0
117.5
120.0
122.5
chi

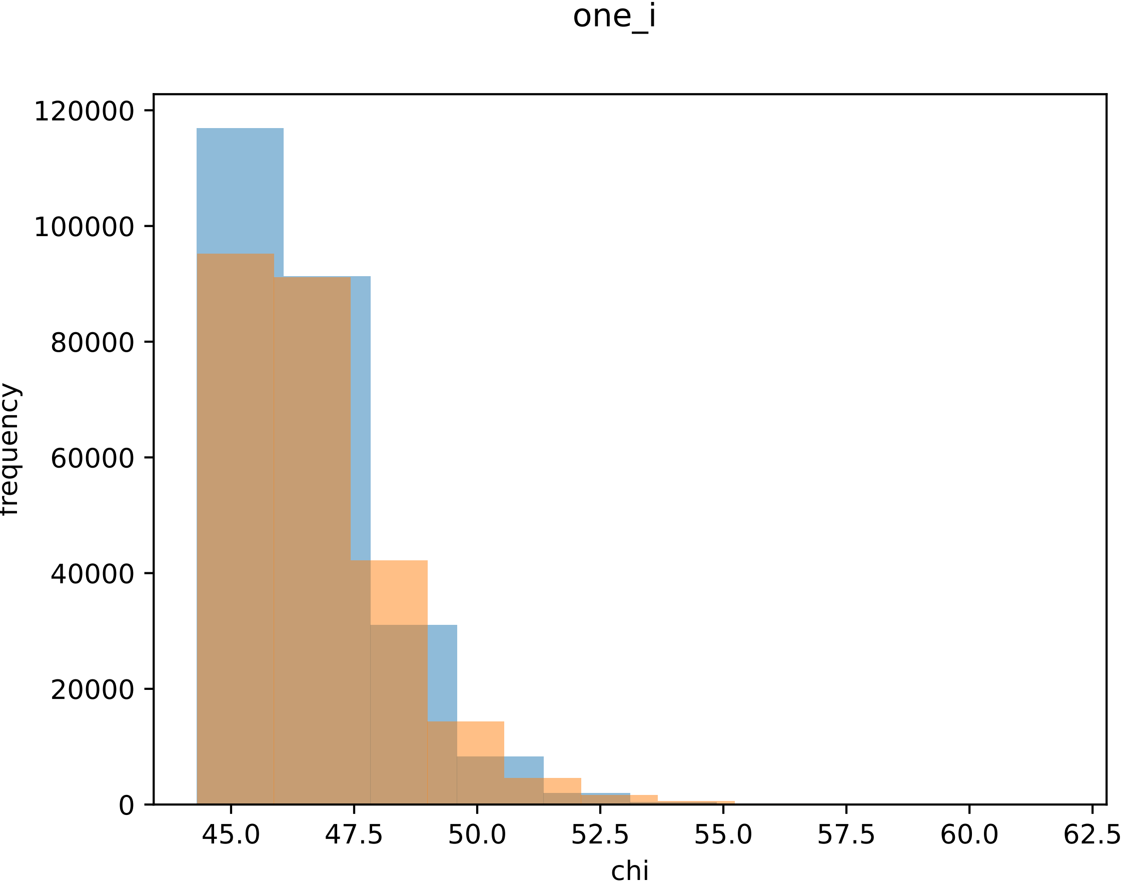

zero_i
chi
iteration
122.5
120.0
117.5
115.0
112.5
110.0
107.5
105.0
0
50000
100000
150000
200000
250000


one_i
40000
30000
20000
10000
0
0.002
0.004
0.006
0.008
0.010
0.012
0.014
mu
40000
30000
20000
10000
0
3
4
5
6
7
8
1e−10
phi
40000
30000
20000
10000
0
100
150
200
250
300
350
beta
40000
30000
20000
10000
0
0.022
0.024
0.026
0.028
0.030
0.032
0.034
lam

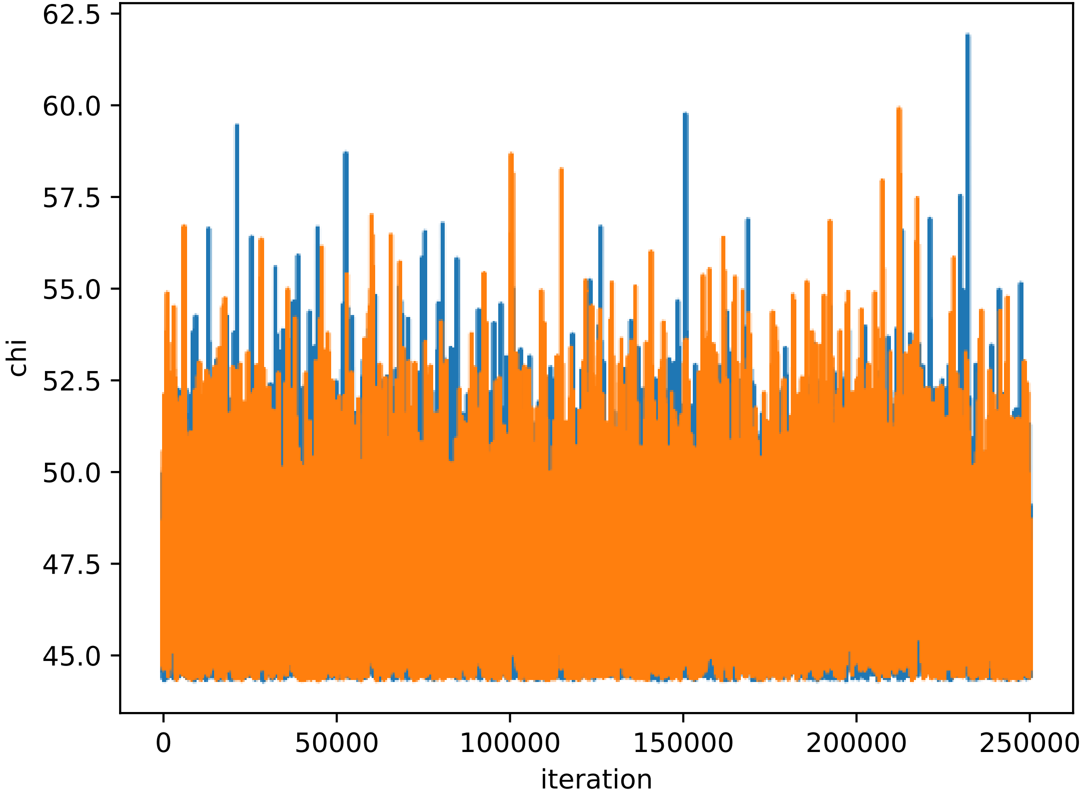
one_i



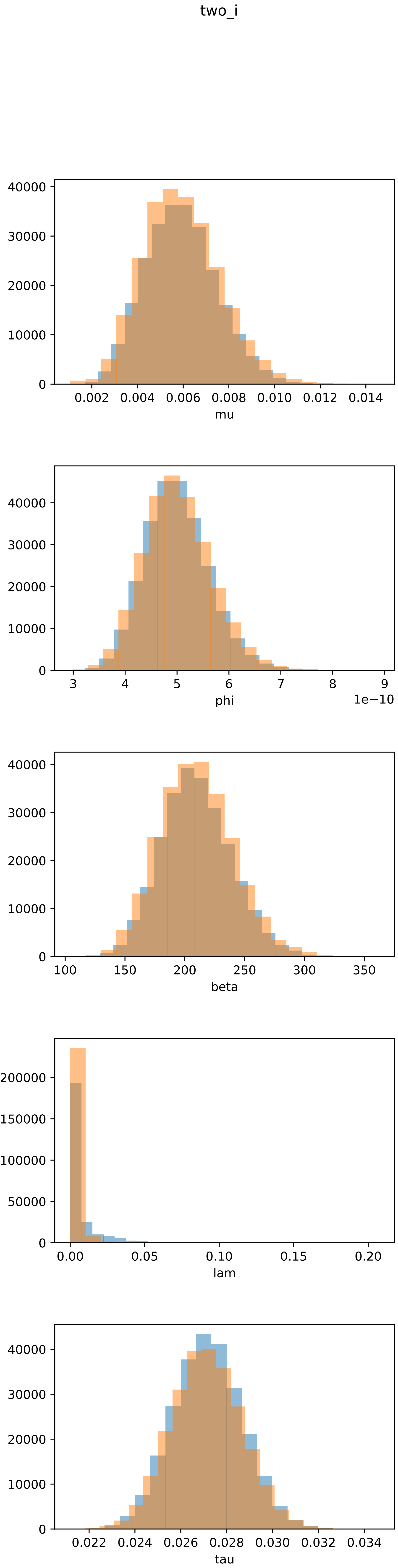
phi
6×10^{-10}
4×10^{-10}
3×10^{-10}
mu
10^{-2}
beta
3×10^{2}
2×10^{2}
10^{2}
mu
10^{-2}
lam
3.4×10^{-2}
3.2×10^{-2}
3×10^{-2}
2.8×10^{-2}
2.6×10^{-2}
2.4×10^{-2}
2.2×10^{-2}
mu
10^{-2}
beta
3×10^{2}
2×10^{2}
10^{2}
phi
3×10^{-10}
4×10^{-10}
6×10^{-10}
lam
3.4×10^{-2}
3.2×10^{-2}
3×10^{-2}
2.8×10^{-2}
2.6×10^{-2}
2.4×10^{-2}
2.2×10^{-2}
phi
3×10^{-10}
4×10^{-10}
6×10^{-10}
lam
3.4×10^{-2}
3.2×10^{-2}
3×10^{-2}
2.8×10^{-2}
2.6×10^{-2}
2.4×10^{-2}
2.2×10^{-2}
beta
10^{2}
2×10^{2}
3×10^{2}

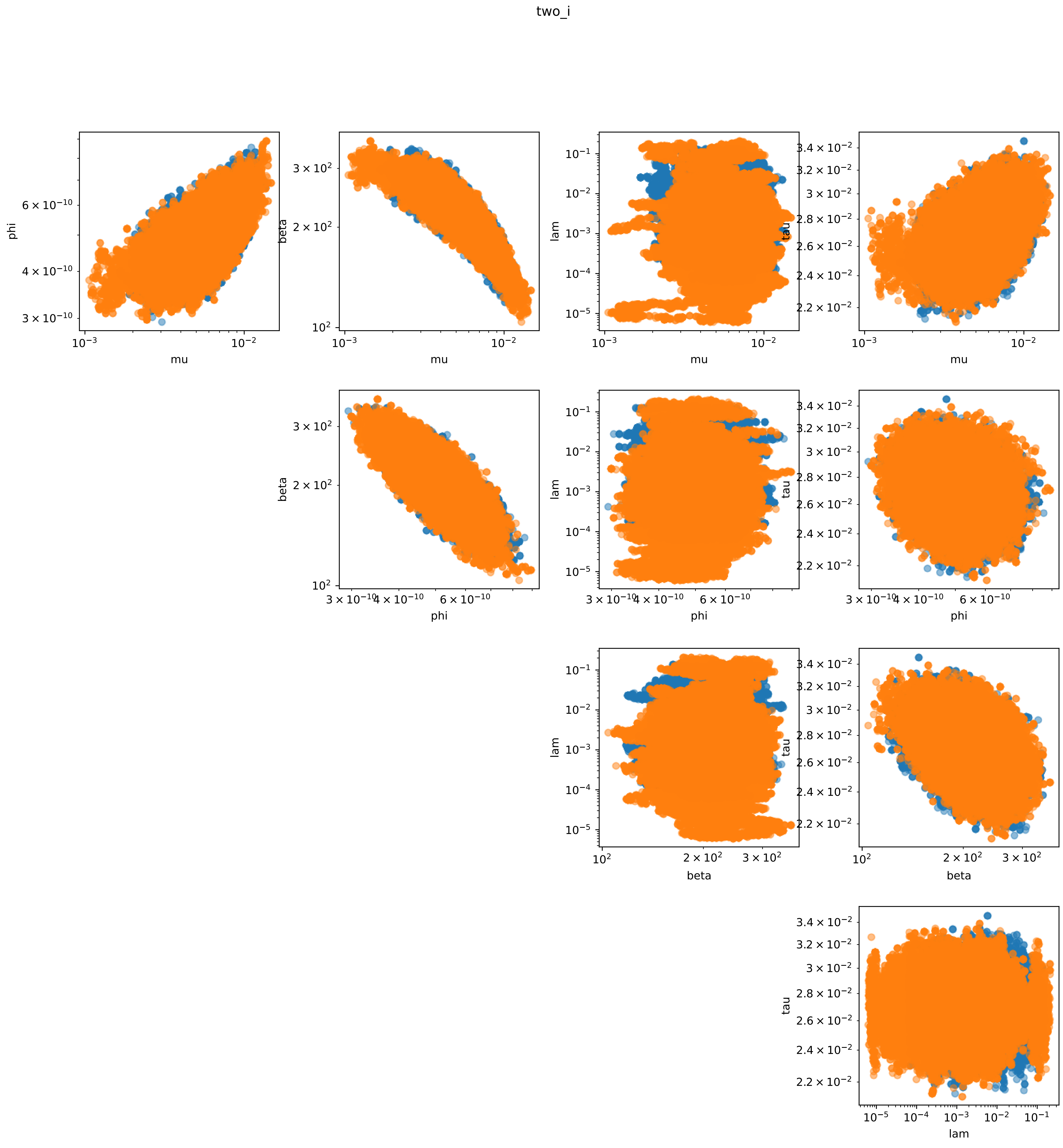

one_i
120000
100000
80000
60000
40000
20000
0
frequency
45.0
47.5
50.0
52.5
55.0
57.5
60.0
62.5
chi

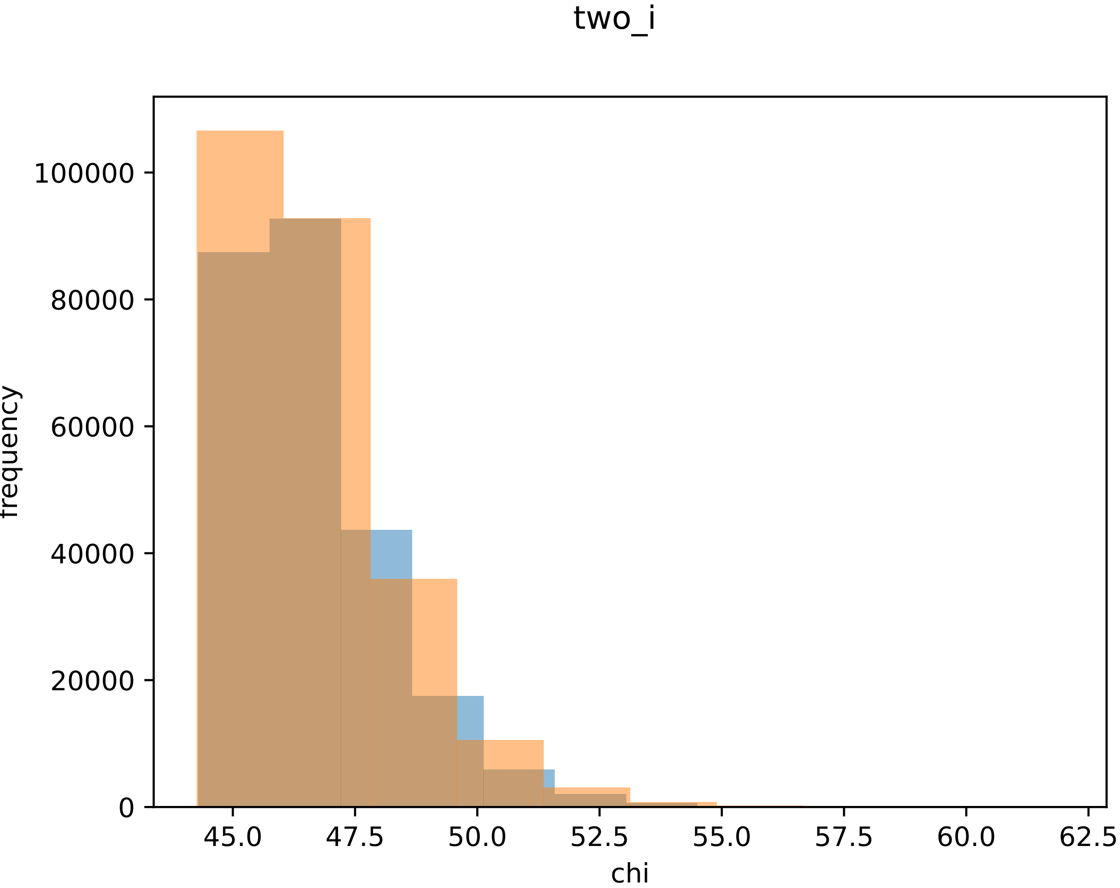
one_i

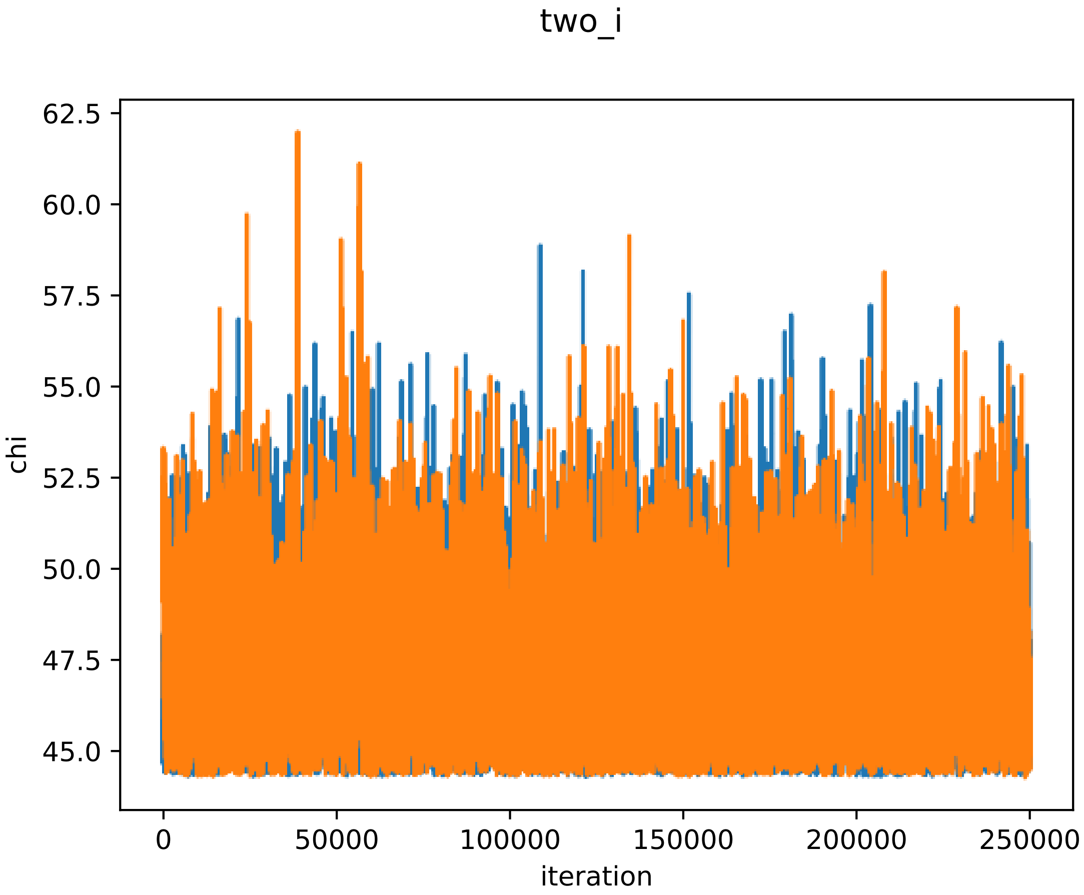


62.5
60.0
57.5
55.0
52.5
50.0
47.5
45.0
chi
0
50000
100000
150000
200000
250000
iteration

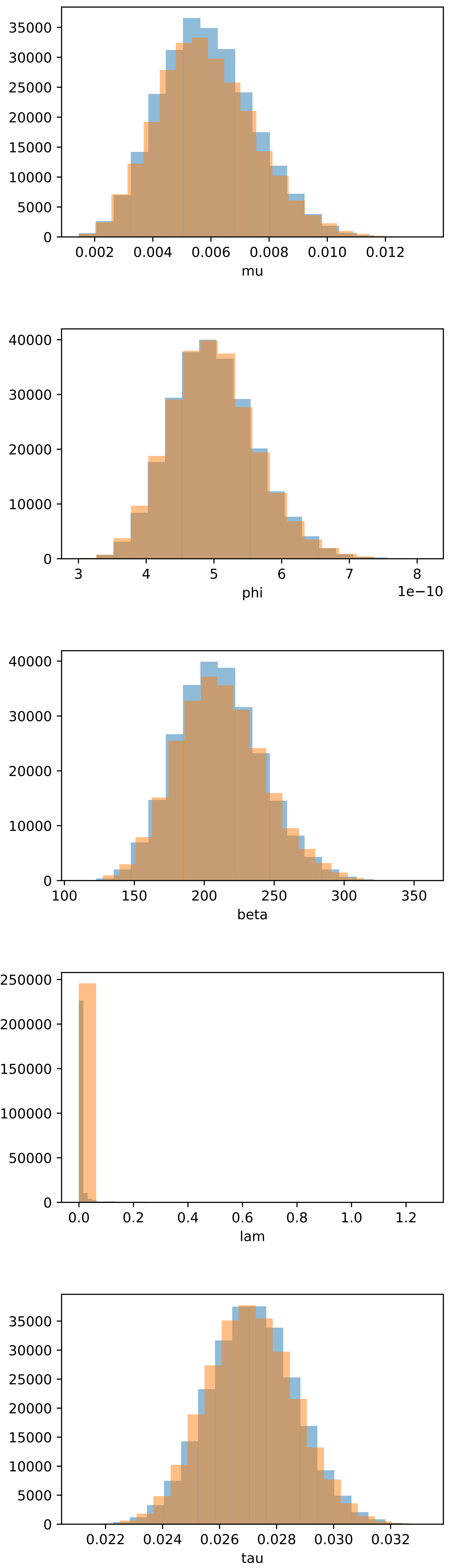

two_i
40000
30000
20000
10000
0
0.002
0.004
0.006
0.008
0.010
0.012
0.014
mu
40000
30000
20000
10000
0
3
4
5
6
7
8
9
1e−10
phi
40000
30000
20000
10000
0
100
150
200
250
300
350
beta
200000
150000
100000
50000
0
0.00
0.05
0.10
0.15
0.20
lam
40000
30000
20000
10000
0
0.022
0.024
0.026
0.028
0.030
0.032
0.034
tau


two_i
phi
mu
beta
lam
tau
10^{-3}
10^{-2}
3×10^{-10}
4×10^{-10}
6×10^{-10}
10^{2}
2×10^{2}
3×10^{2}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
10^{-1}
2.2×10^{-2}
2.4×10^{-2}
2.6×10^{-2}
2.8×10^{-2}
3×10^{-2}
3.2×10^{-2}
3.4×10^{-2}

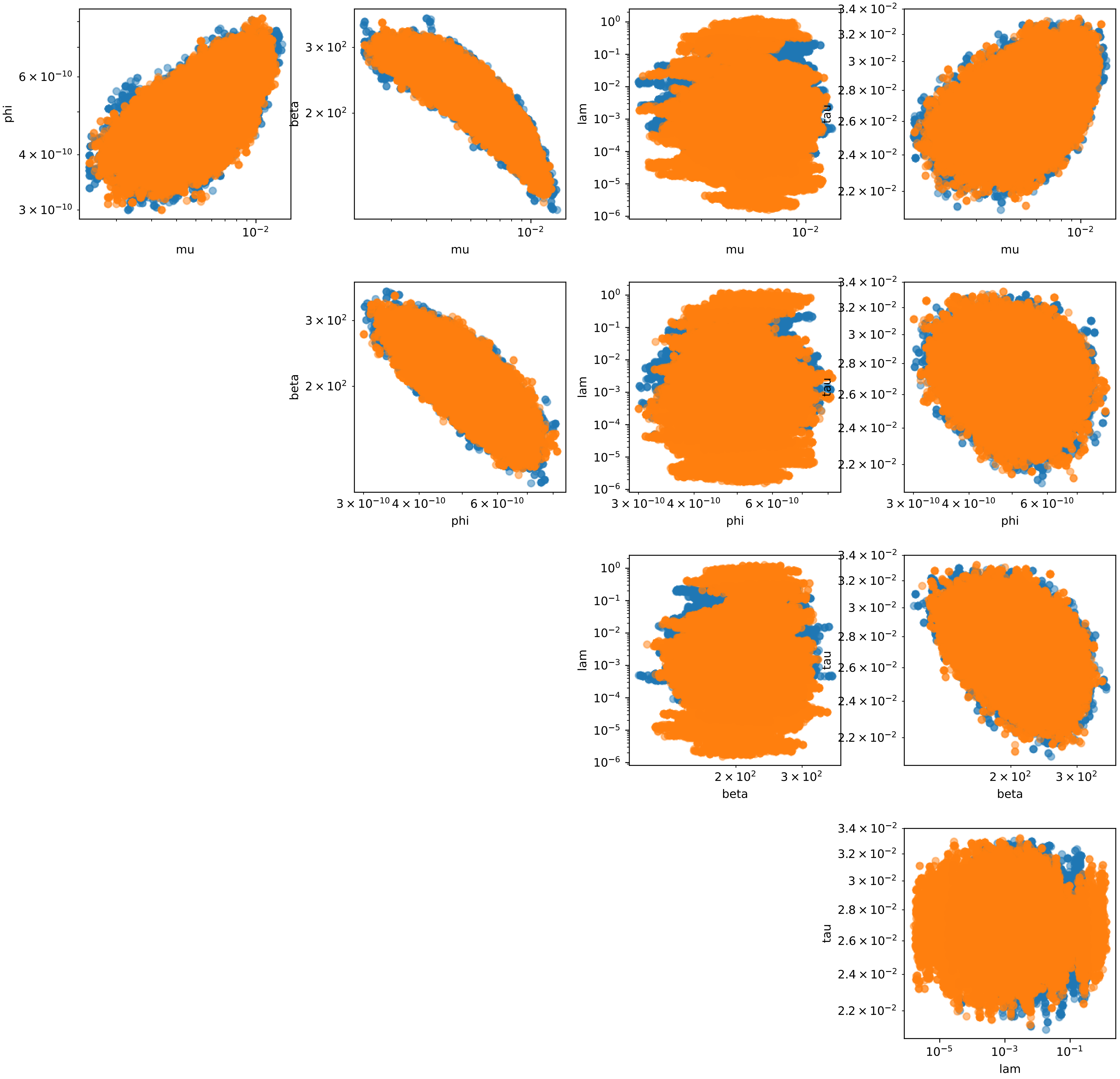

two_i
100000
80000
60000
40000
20000
0
frequency
45.0
47.5
50.0
52.5
55.0
57.5
60.0
62.5
chi

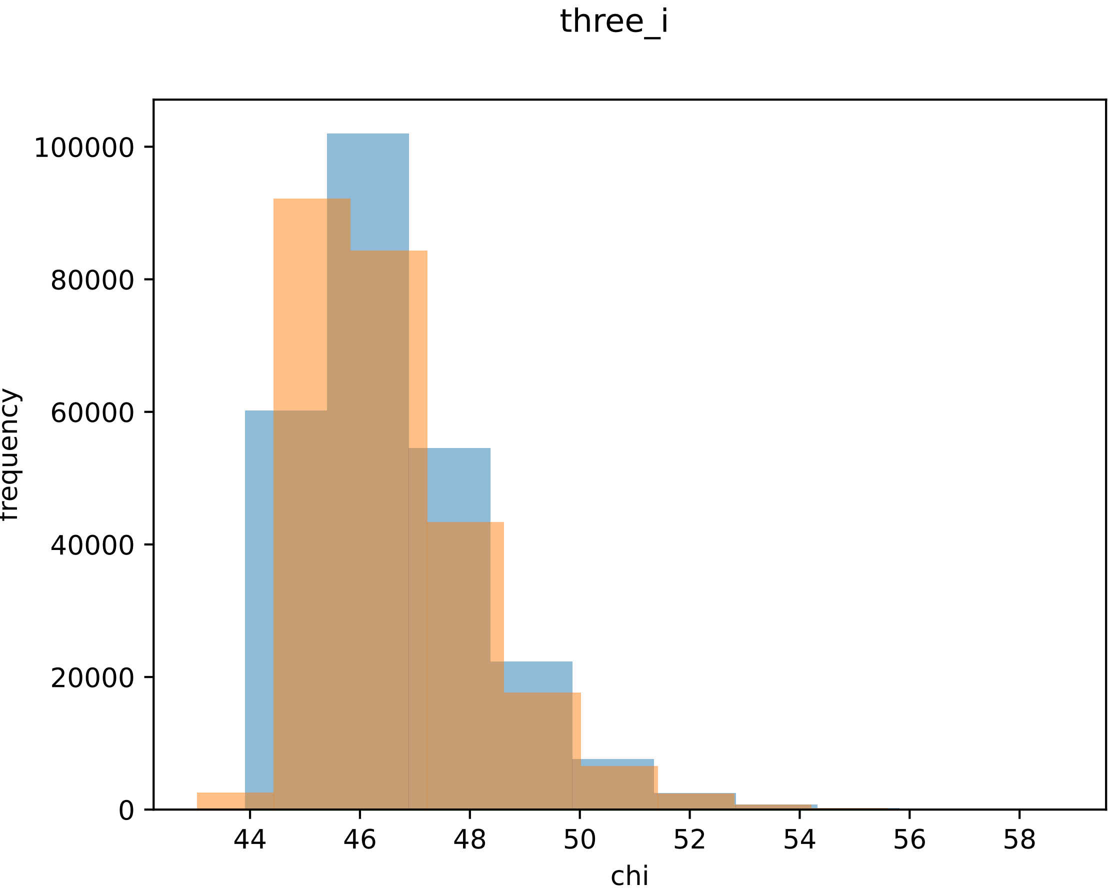

two_i
chi
62.5
60.0
57.5
55.0
52.5
50.0
47.5
45.0
0
50000
100000
150000
200000
250000
iteration

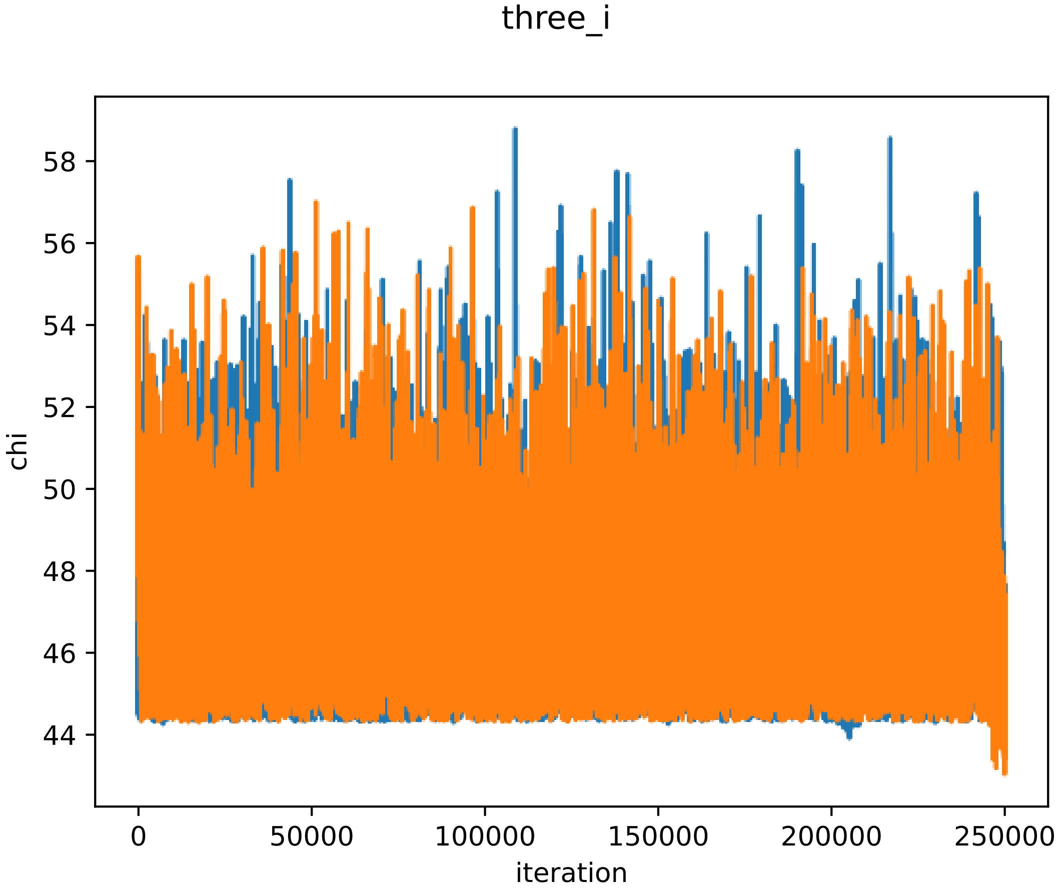
three_i

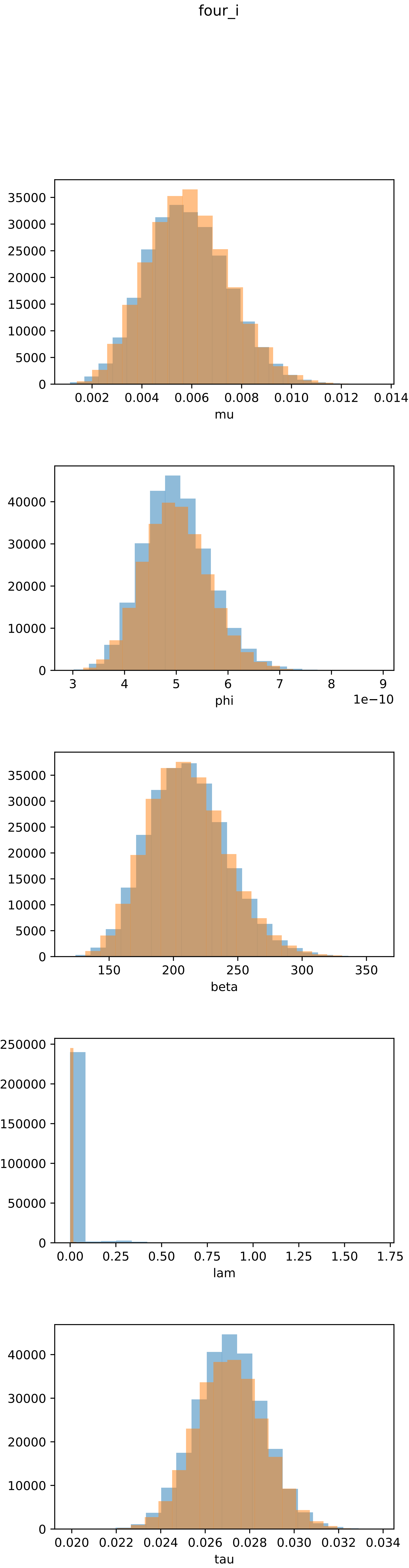

35000
30000
25000
20000
15000
10000
5000
0
0.002
0.004
0.006
0.008
0.010
0.012
mu
40000
30000
20000
10000
0
3
4
5
6
7
8
1e−10
phi
40000
30000
20000
10000
0
100
150
200
250
300
350
beta
250000
200000
150000
100000
50000
0
0.0
0.2
0.4
0.6
0.8
1.0
1.2
lam
35000
30000
25000
20000
15000
10000
5000
0
0.022
0.024
0.026
0.028
0.030
0.032
tau

three_i

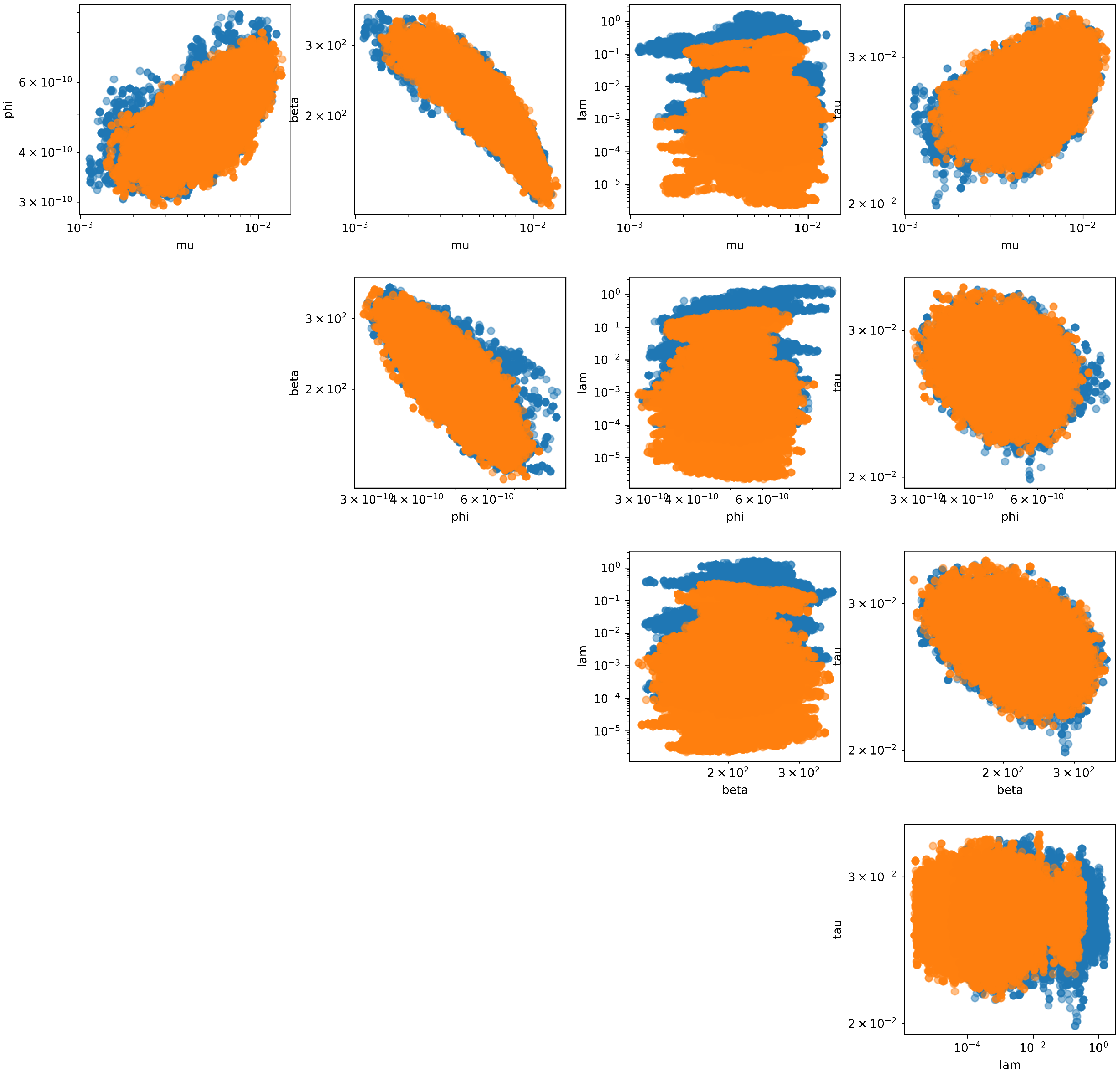

phi
mu
6×10^{-10}
4×10^{-10}
3×10^{-10}
10^{-2}
beta
3×10^{2}
2×10^{2}
lam
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-6}
tau
3.4×10^{-2}
3.2×10^{-2}
3×10^{-2}
2.8×10^{-2}
2.6×10^{-2}
2.4×10^{-2}
2.2×10^{-2}
phi
3×10^{-10} 4×10^{-10} 6×10^{-10}
beta
2×10^{2} 3×10^{2}
lam
10^{-5} 10^{-3} 10^{-1}


three_i
frequency
chi
0
20000
40000
60000
80000
100000
44
46
48
50
52
54
56
58

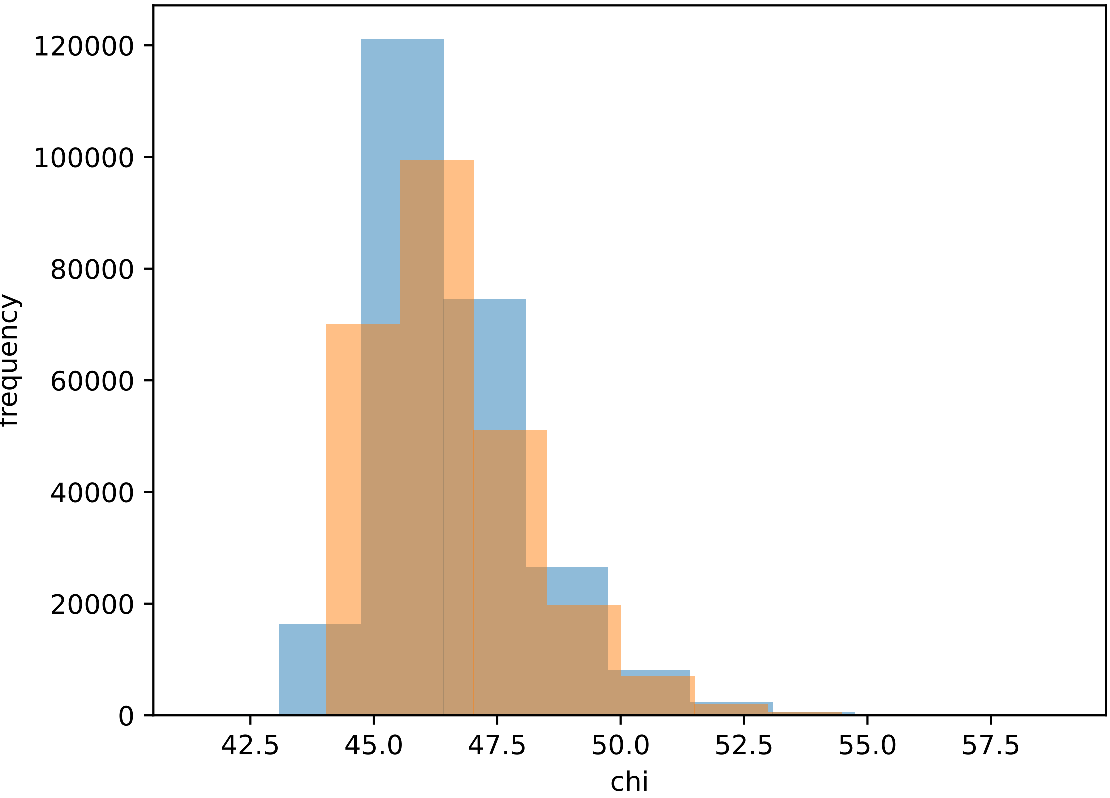

three_i
chi
iteration
58
56
54
52
50
48
46
44
0
50000
100000
150000
200000
250000

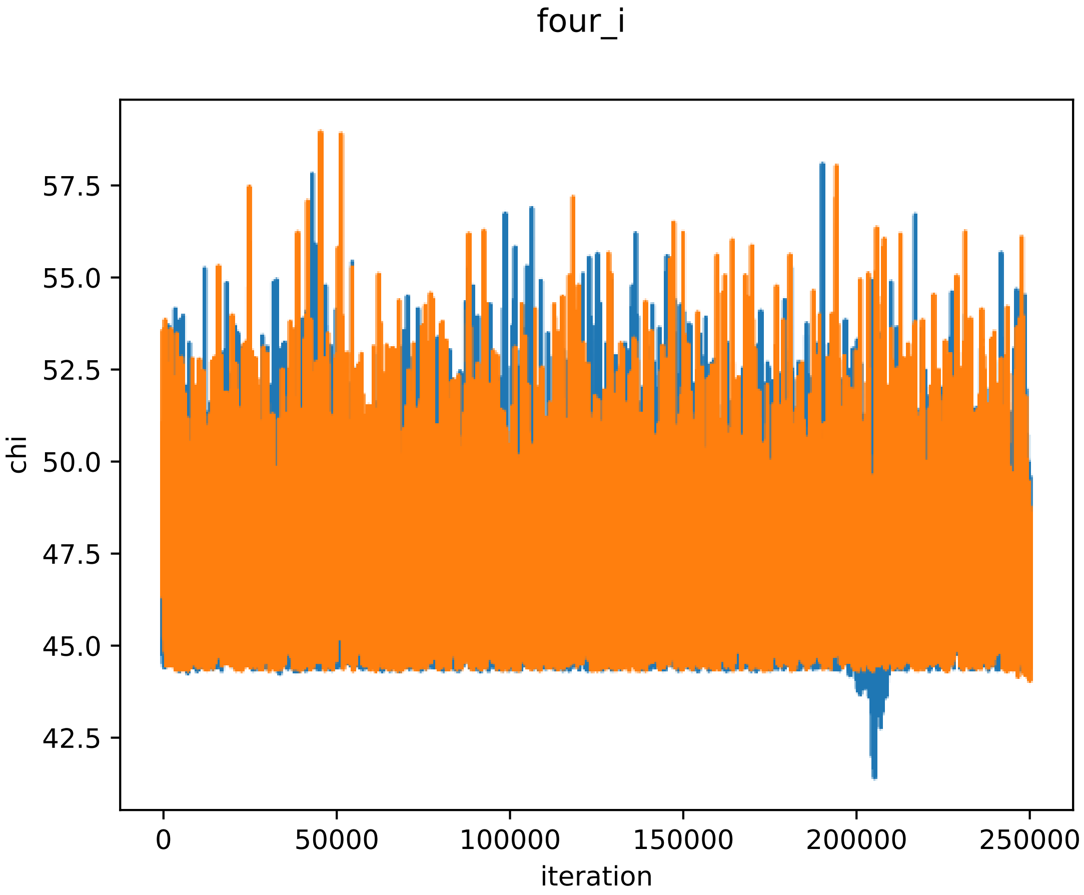

four_i
35000
30000
25000
20000
15000
10000
5000
0
0.002
0.004
0.006
0.008
0.010
0.012
0.014
mu
40000
30000
20000
10000
0
3
4
5
6
7
8
9
phi
1e−10
35000
30000
25000
20000
15000
10000
5000
0
150
200
250
300
350
beta
250000
200000
150000
100000
50000
0
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
lam
40000
30000
20000
10000
0
0.020
0.022
0.024
0.026
0.028
0.030
0.032
0.034
tau

four_i

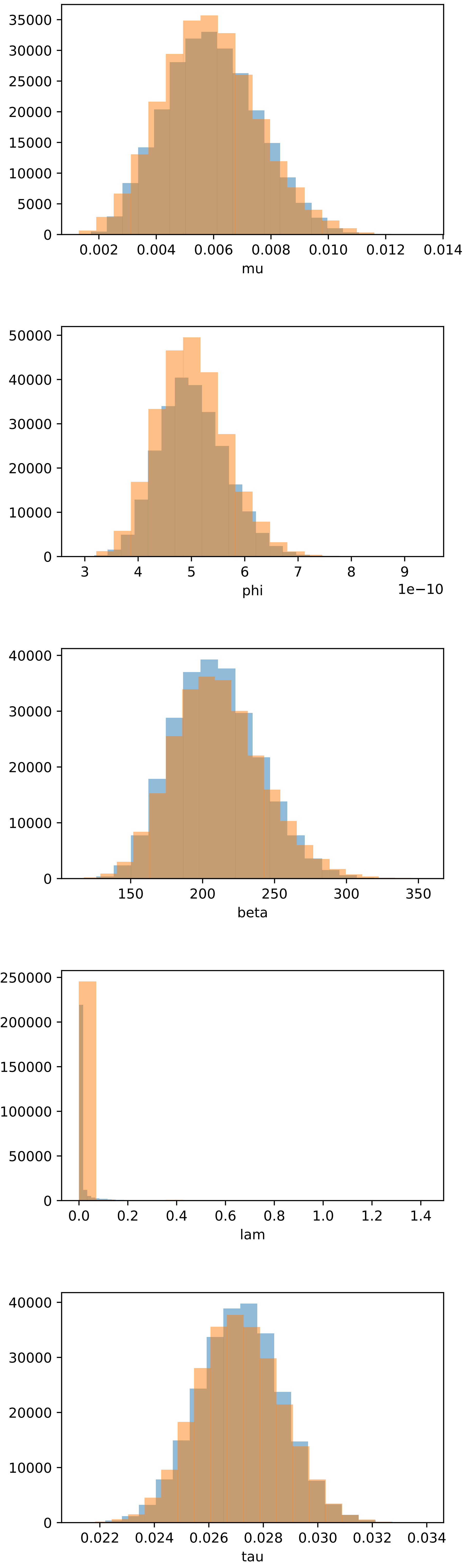

phi
6×10^{-10}
4×10^{-10}
3×10^{-10}
10^{-3}
10^{-2}
mu
beta
3×10^{2}
2×10^{2}
lam
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
tau
3×10^{-2}
2×10^{-2}
phi
beta
lam
10^{-4}
10^{-2}
10^{0}

four_i

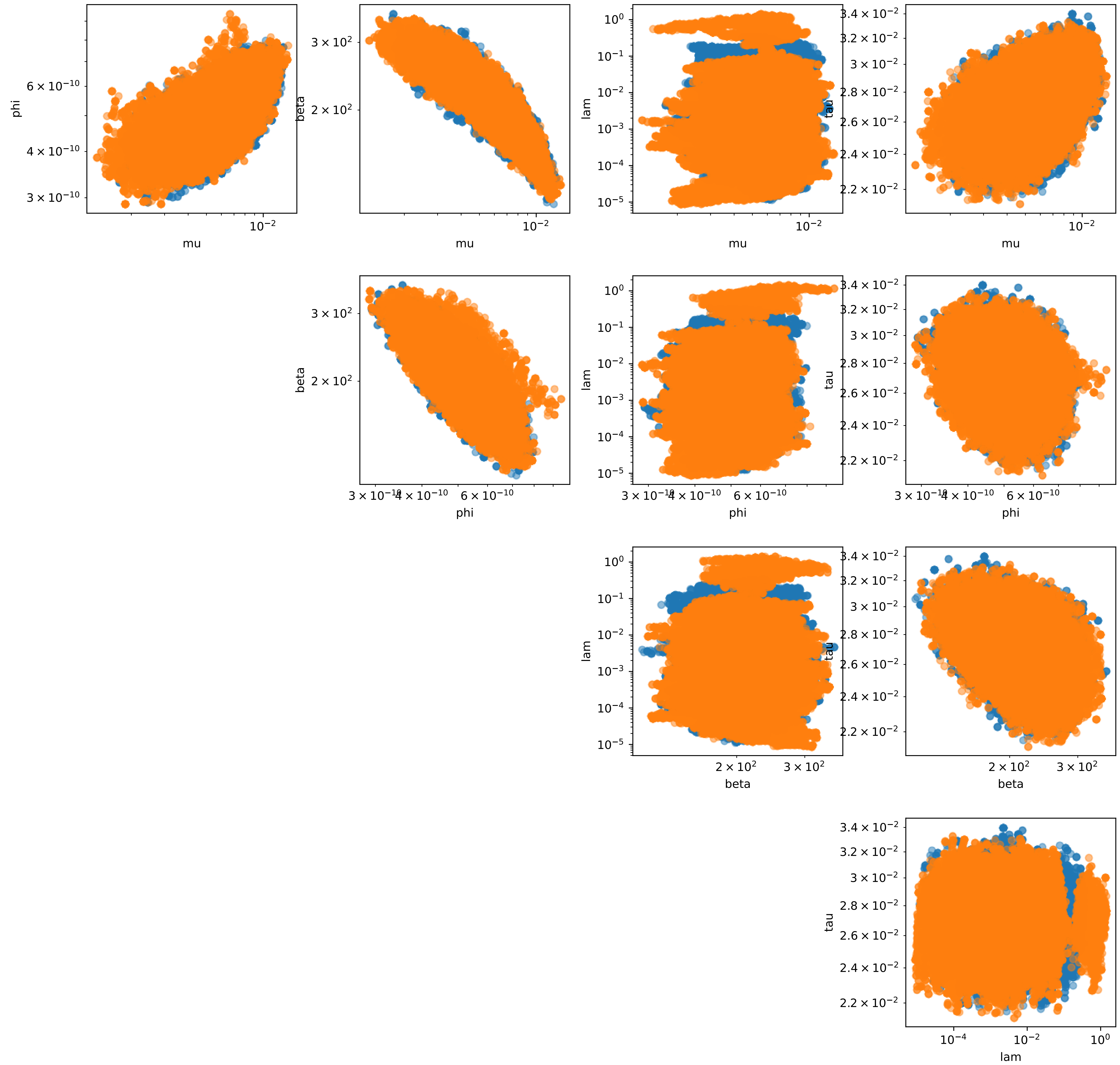

frequency
120000
100000
80000
60000
40000
20000
0
42.5
45.0
47.5
50.0
52.5
55.0
57.5
chi

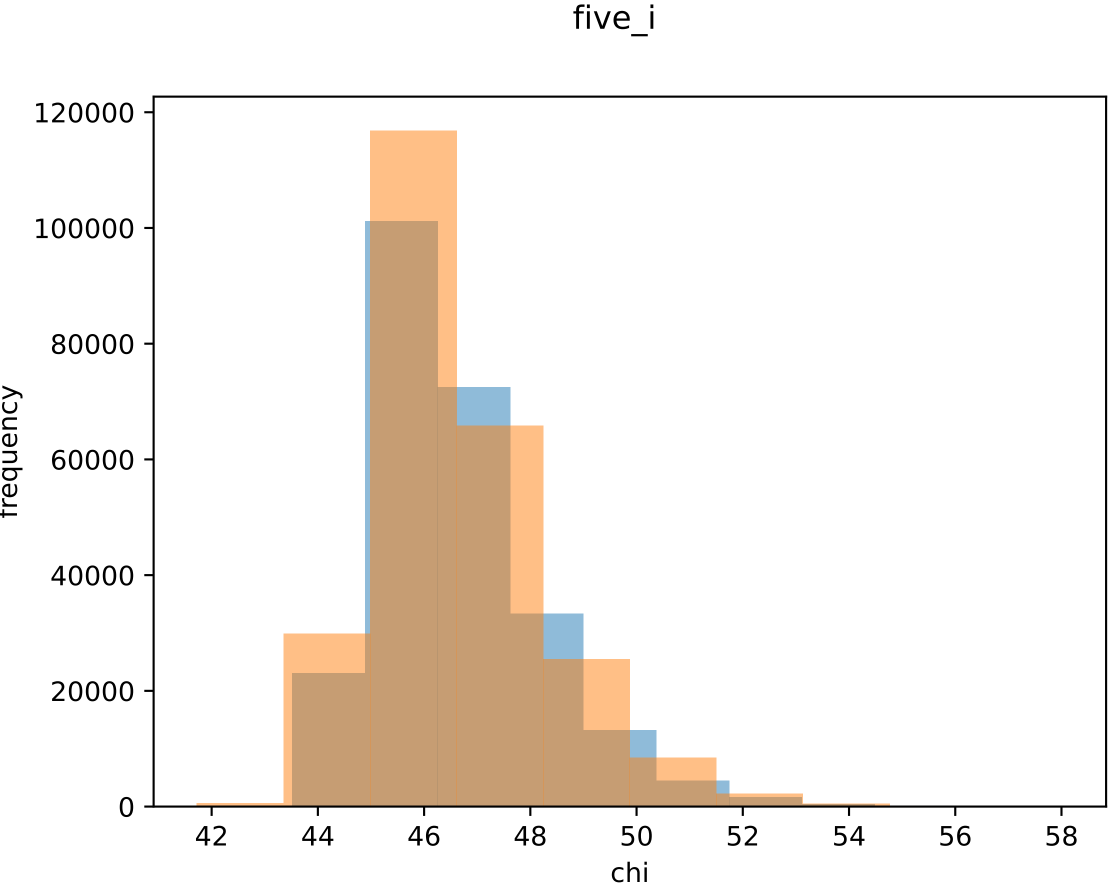

four_i
chi
iteration
57.5
55.0
52.5
50.0
47.5
45.0
42.5
0
50000
100000
150000
200000
250000

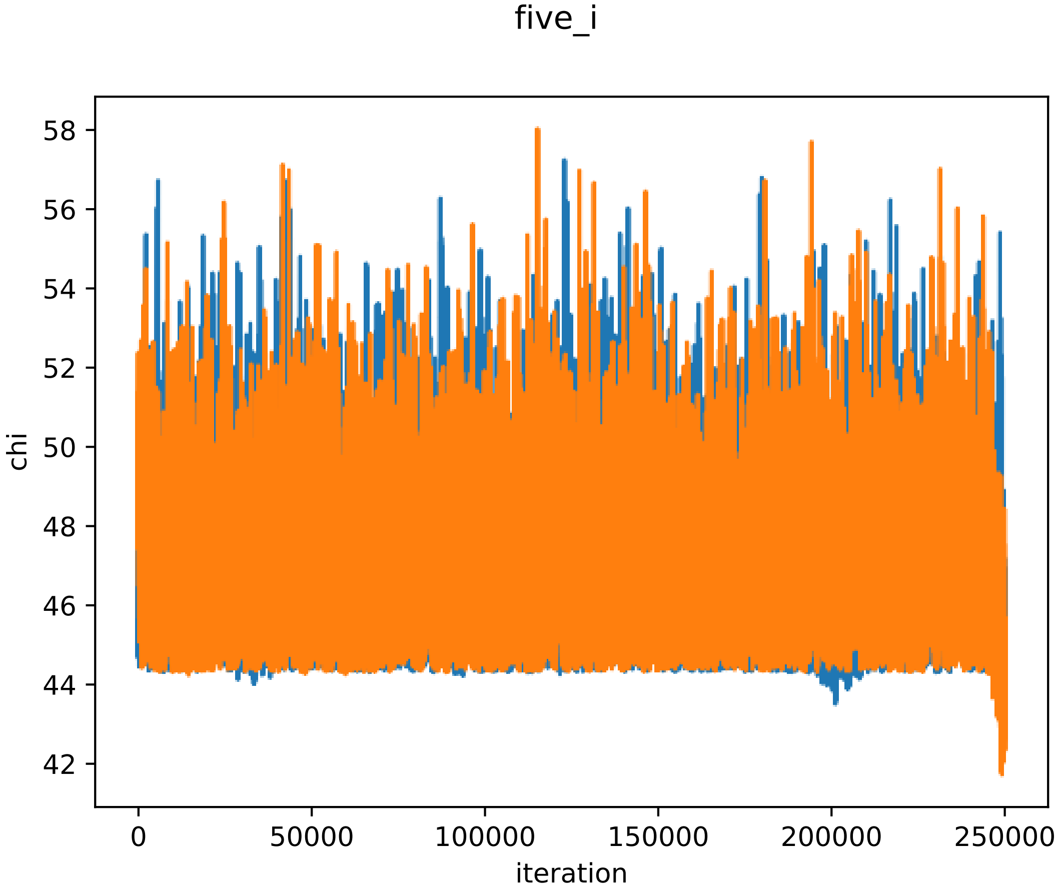
five_i


35000
30000
25000
20000
15000
10000
5000
0
0.002
0.004
0.006
0.008
0.010
0.012
0.014
mu
50000
40000
30000
20000
10000
0
3
4
5
6
7
8
9
1e−10
phi
40000
30000
20000
10000
0
150
200
250
300
350
beta
250000
200000
150000
100000
50000
0
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
lam
40000
30000
20000
10000
0
0.022
0.024
0.026
0.028
0.030
0.032
0.034
tau

five_i


mu
phi
beta
lam
tau
6×10^{-10}
4×10^{-10}
3×10^{-10}
10^{-2}
3×10^{2}
2×10^{2}
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
10^{-5}
3.4×10^{-2}
3.2×10^{-2}
3×10^{-2}
2.8×10^{-2}
2.6×10^{-2}
2.4×10^{-2}
2.2×10^{-2}
3×10^{-10}
4×10^{-10}
6×10^{-10}
10^{-4}
10^{-2}
10^{0}


five_i
frequency
120000
100000
80000
60000
40000
20000
0
42
44
46
48
50
52
54
56
58
chi



five_i
chi
58
56
54
52
50
48
46
44
42
iteration
0
50000
100000
150000
200000
250000