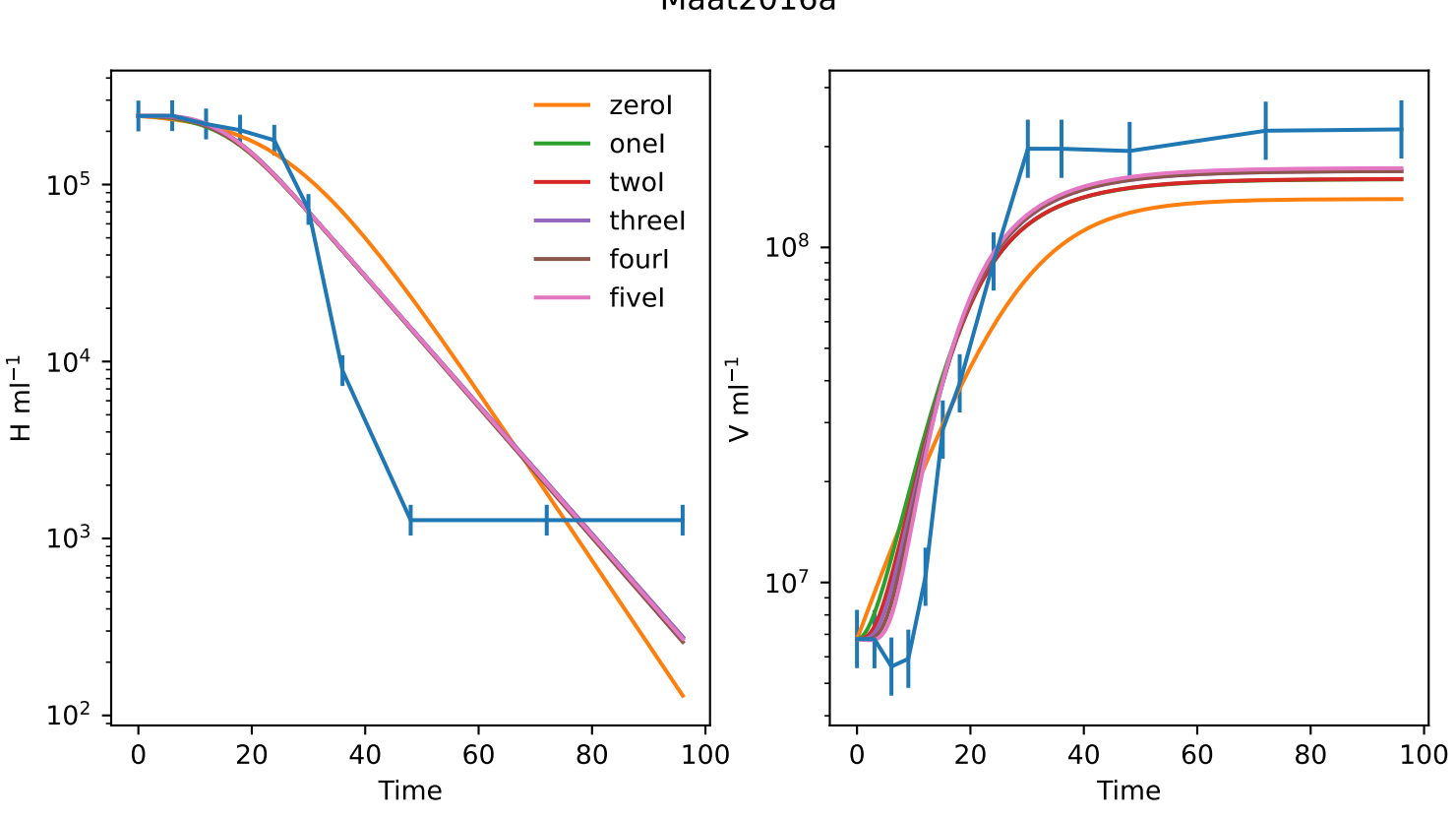
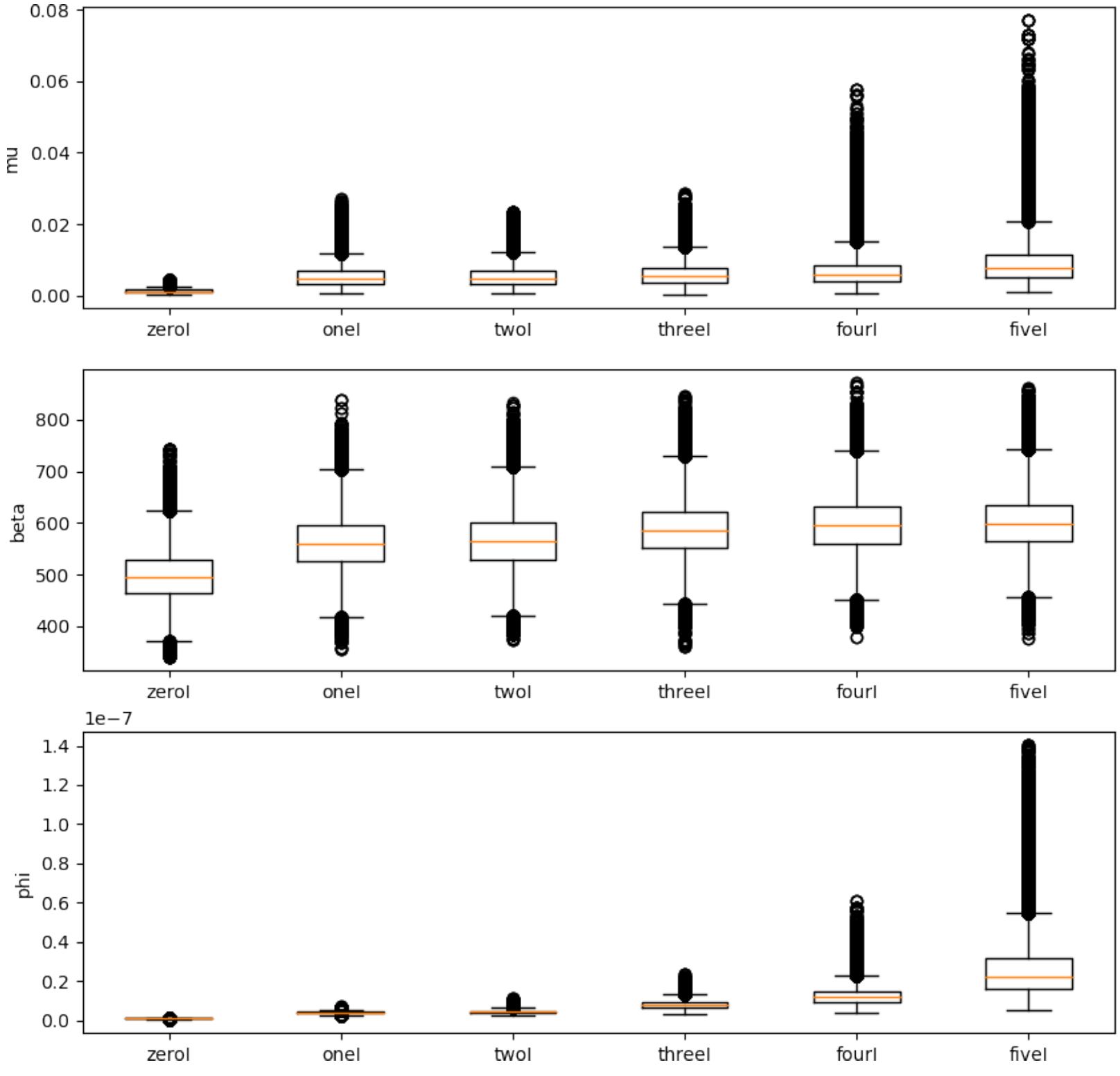
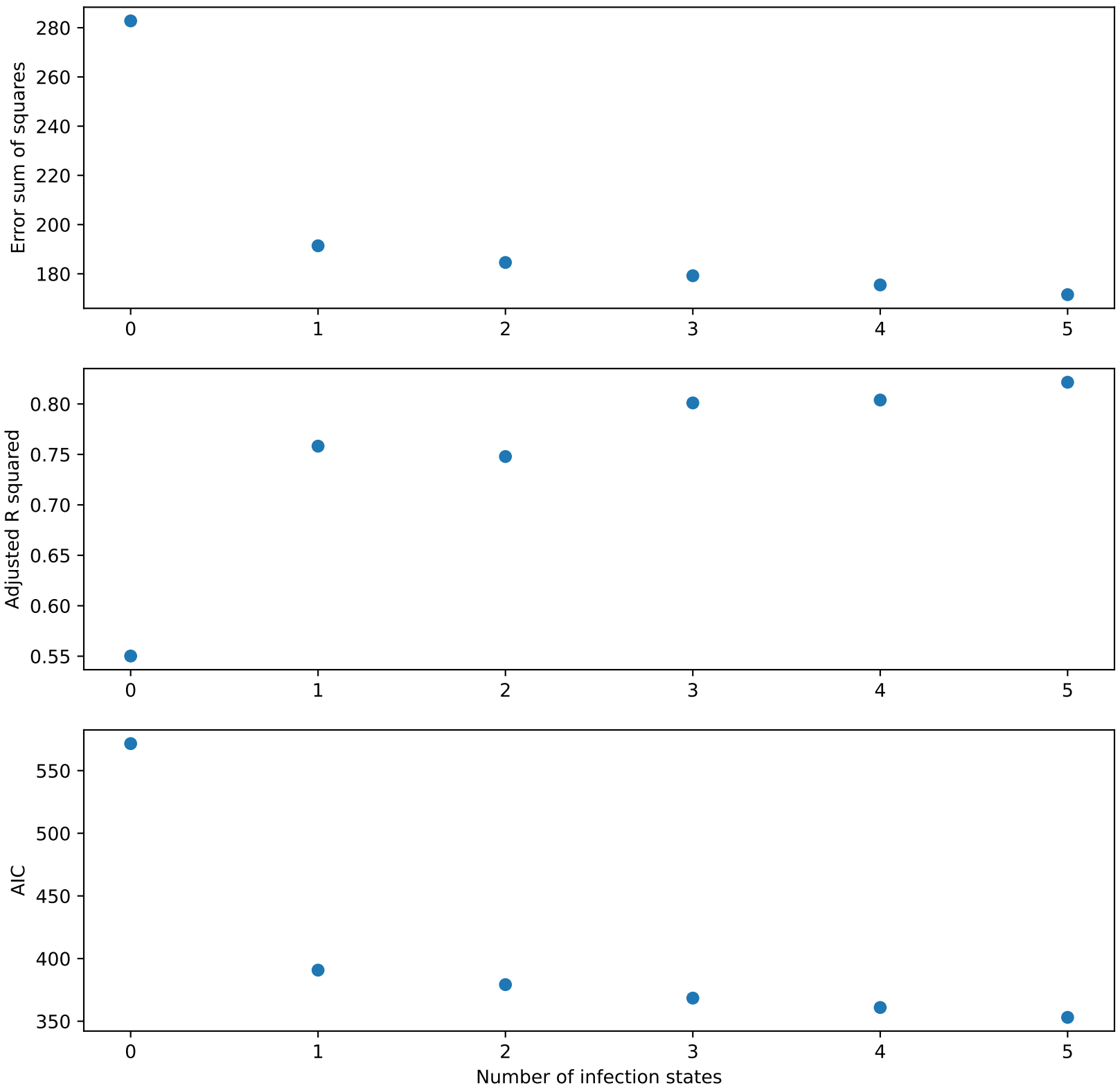
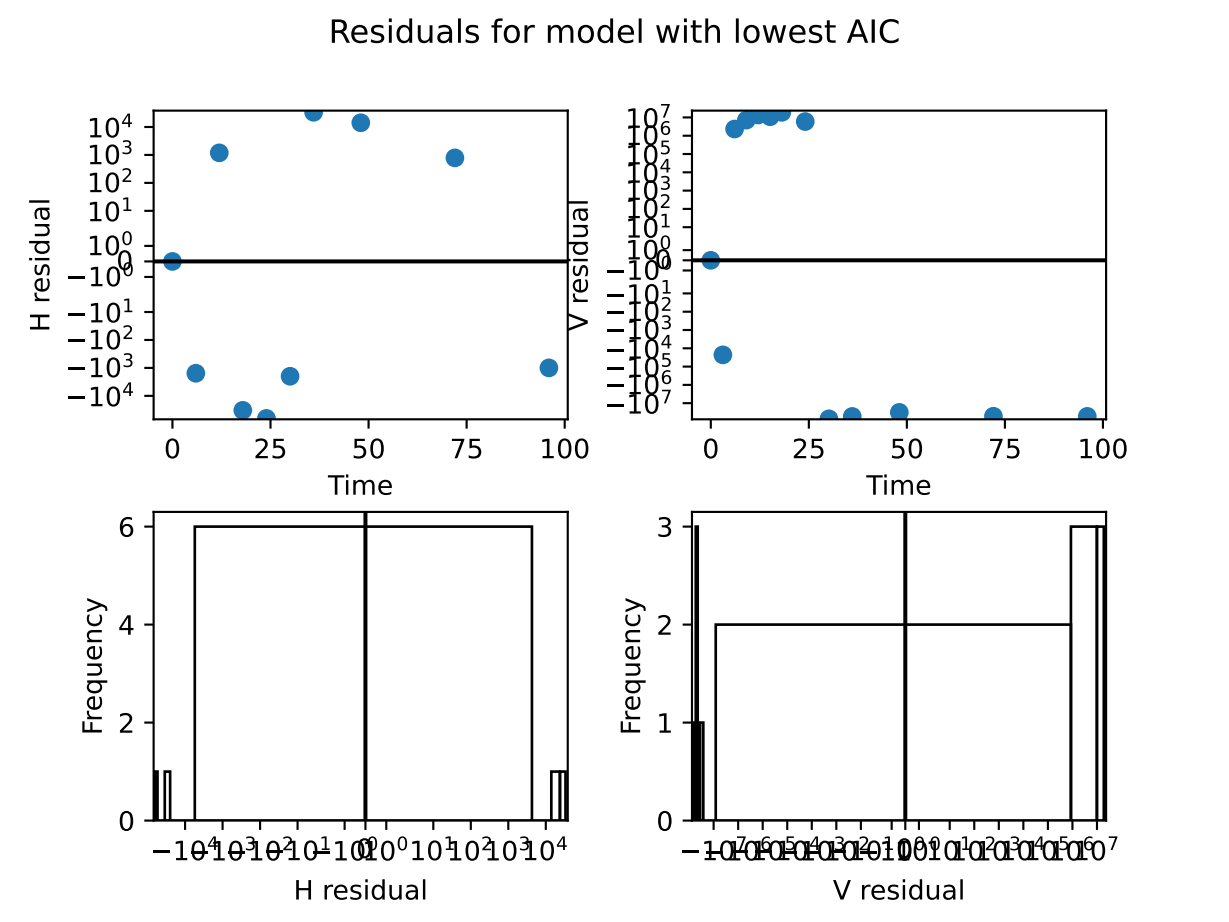

Maat2016a
zeroI
oneI
twoI
threeI
fourI
fiveI
H ml^{-1}
V ml^{-1}
Time
Time
10^2
10^3
10^4
10^5
10^7
10^8
0
20
40
60
80
100

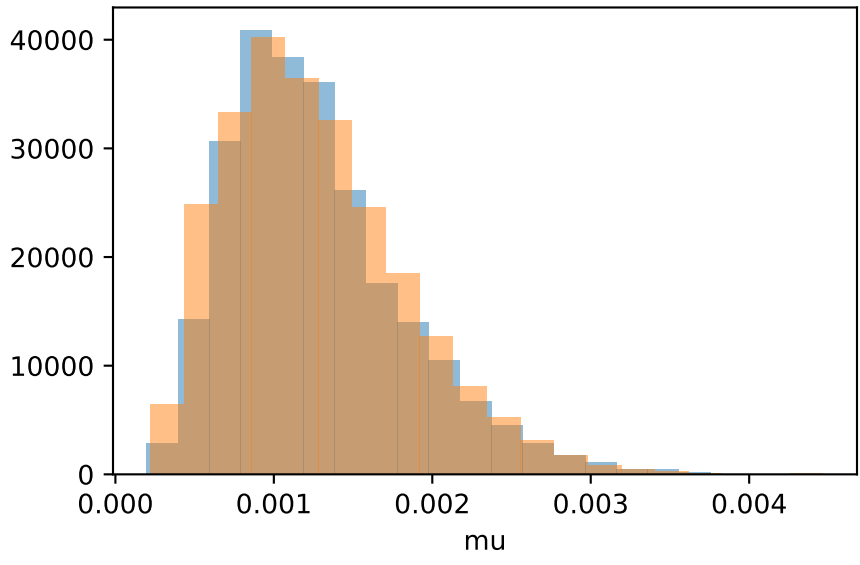
Maat2016a

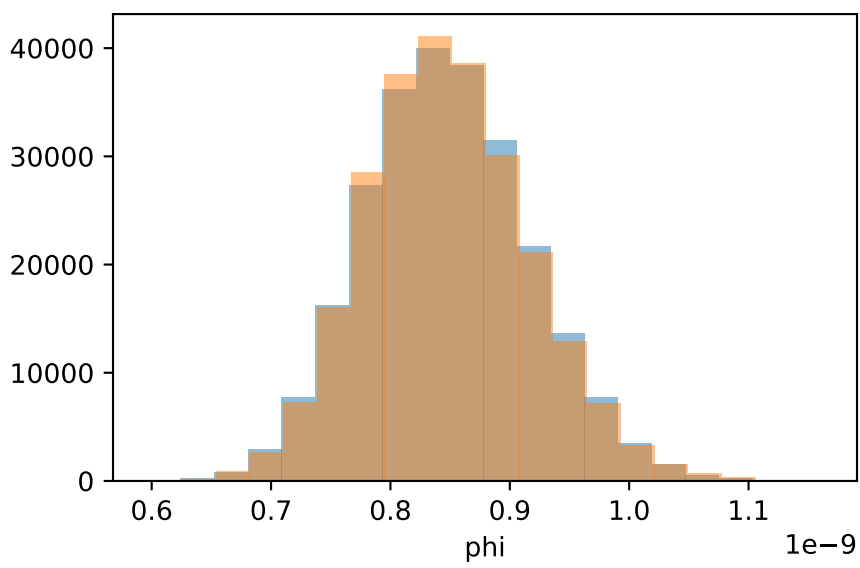

mu
0.08
0.06
0.04
0.02
0.00
zeroI
oneI
twoI
threeI
fourI
fiveI
beta
800
700
600
500
400
zeroI
oneI
twoI
threeI
fourI
fiveI
1e−7
phi
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
zeroI
oneI
twoI
threeI
fourI
fiveI

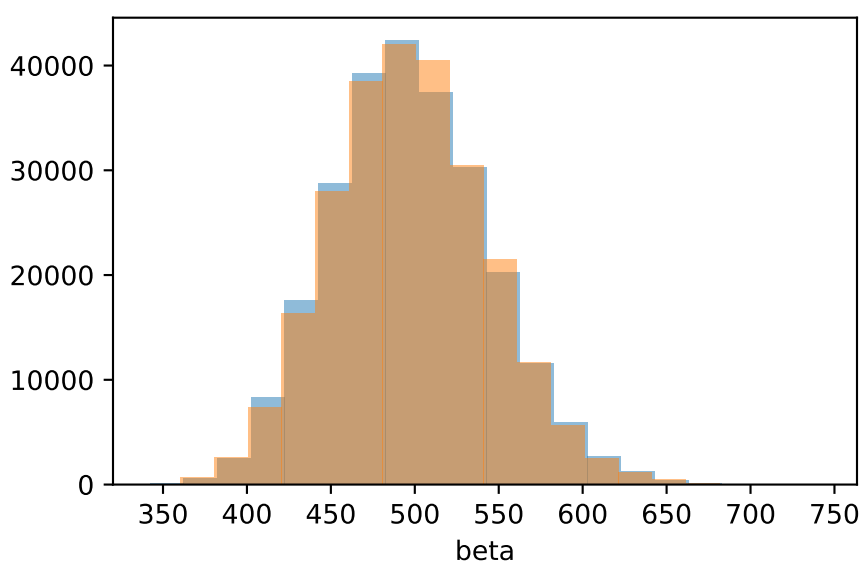

Maat2016a
Error sum of squares
280
260
240
220
200
180
0
1
2
3
4
5
Adjusted R squared
0.80
0.75
0.70
0.65
0.60
0.55
0
1
2
3
4
5
AIC
550
500
450
400
350
0
1
2
3
4
5
Number of infection states

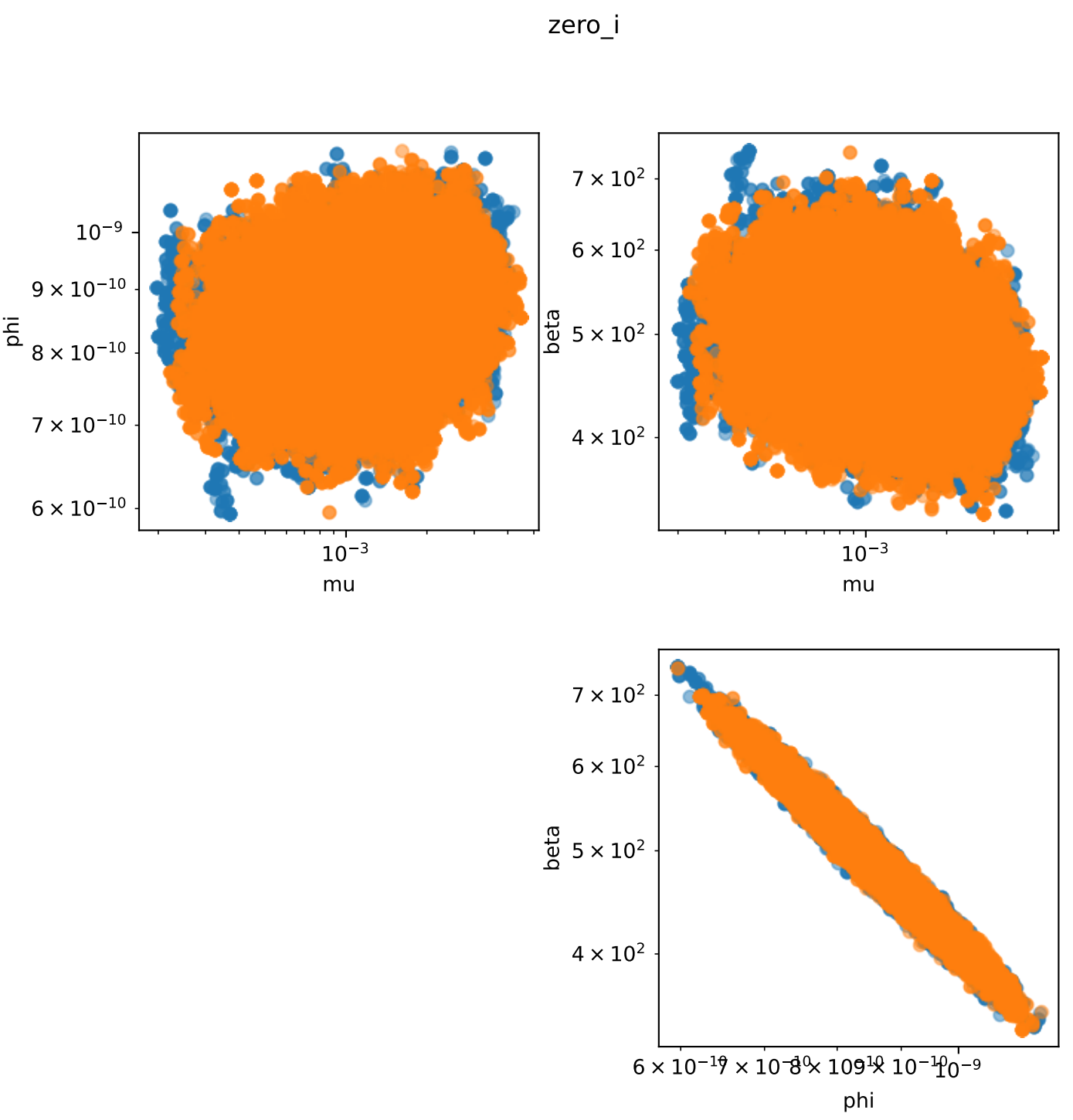

Residuals for model with lowest AIC
H residual
Time
V residual
Time
Frequency
H residual
Frequency
V residual

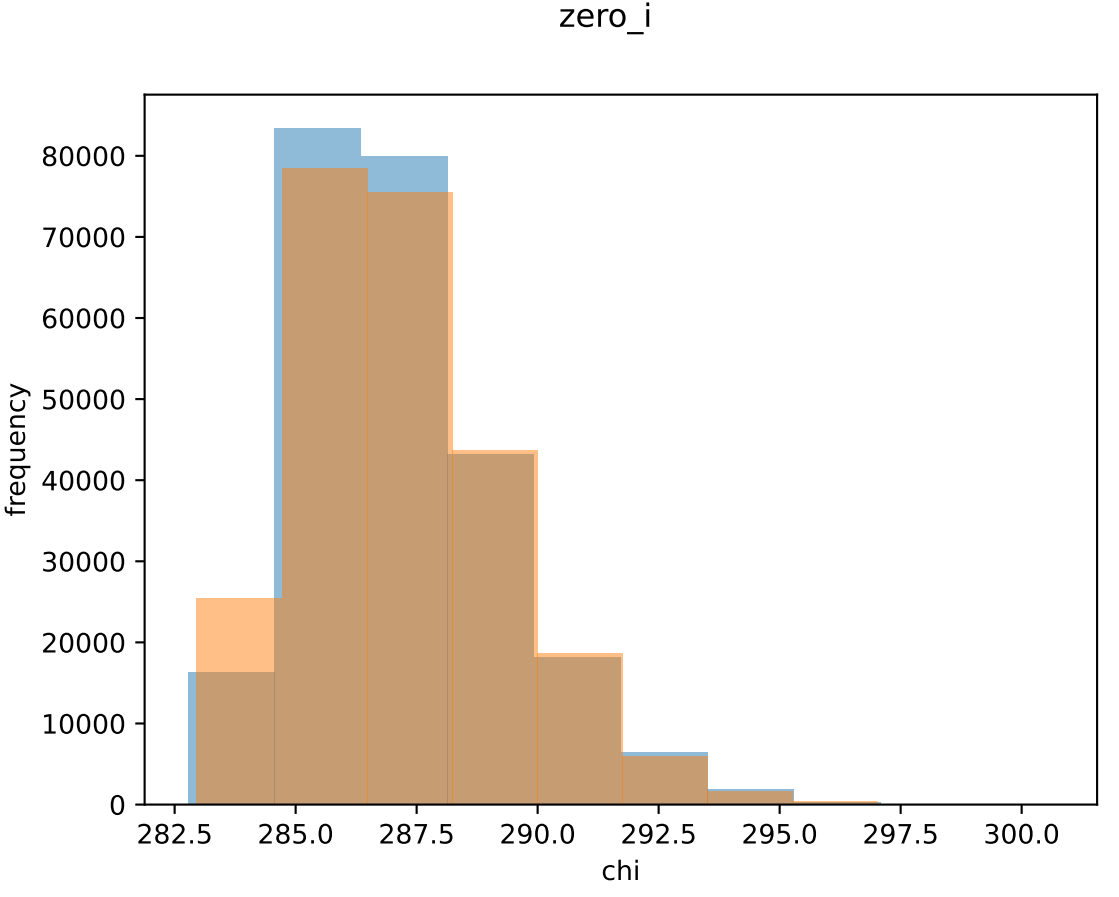
zero_i

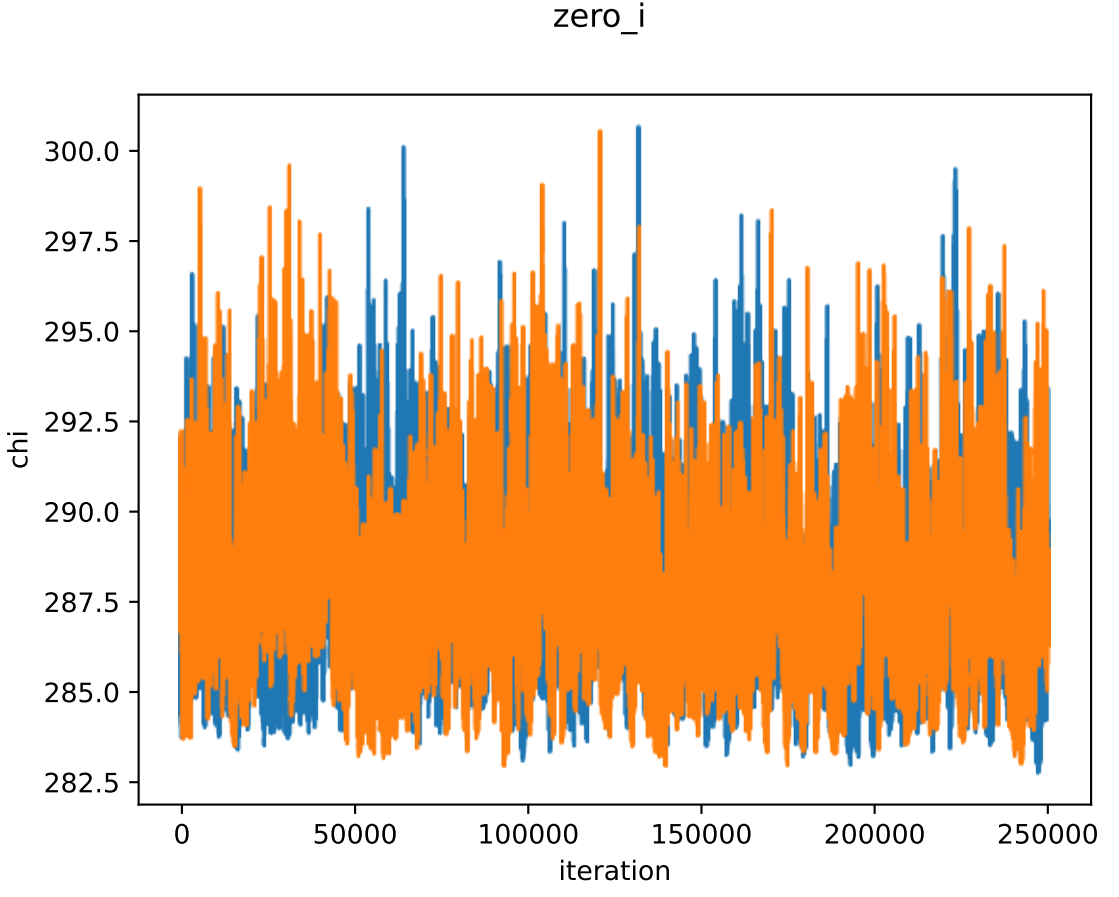

40000
30000
20000
10000
0
0.000
0.001
0.002
0.003
0.004
mu


40000
30000
20000
10000
0
0.6
0.7
0.8
0.9
1.0
1.1
phi
1e−9

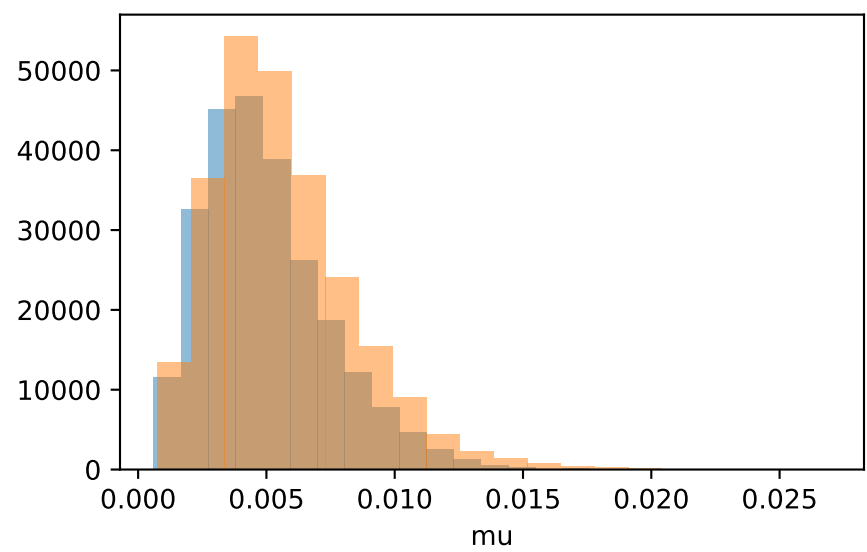

40000
30000
20000
10000
0
350
400
450
500
550
600
650
700
750
beta

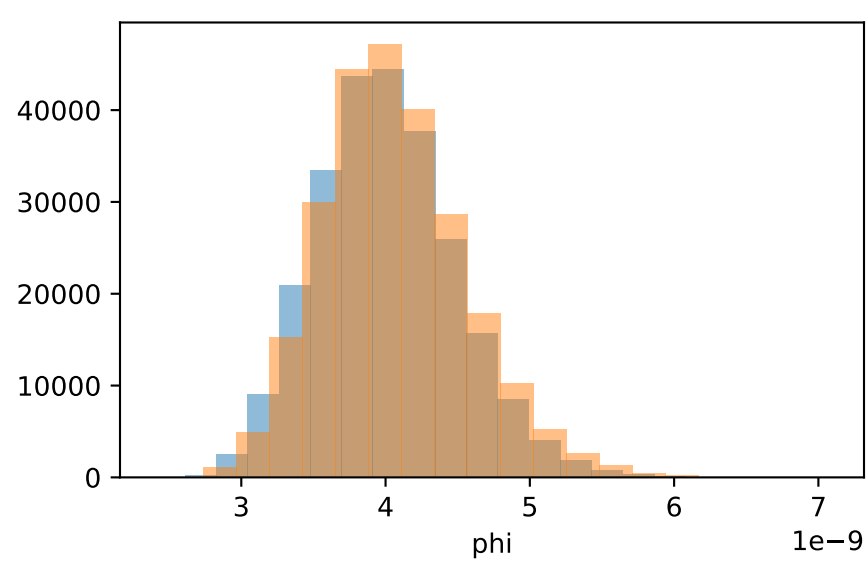

zero_i
phi
mu
beta
mu
beta
phi

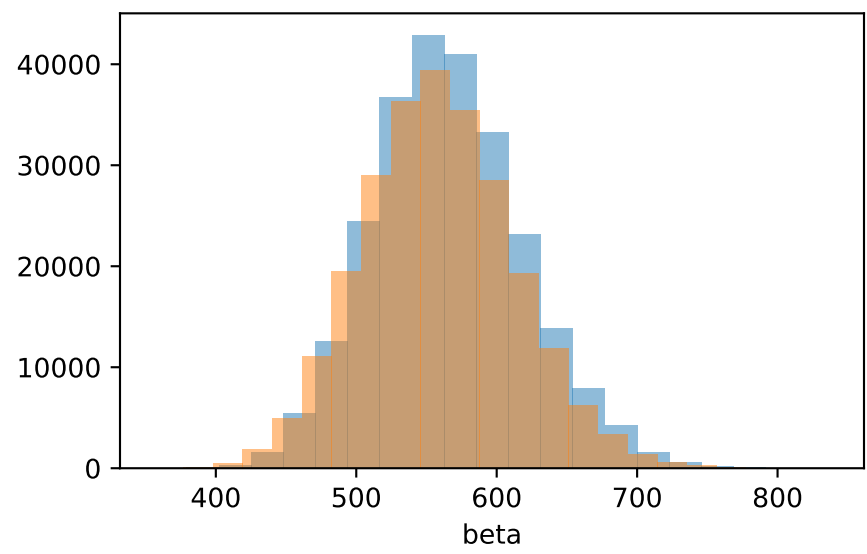

zero_i
frequency
80000
70000
60000
50000
40000
30000
20000
10000
0
282.5
285.0
287.5
290.0
292.5
295.0
297.5
300.0
chi

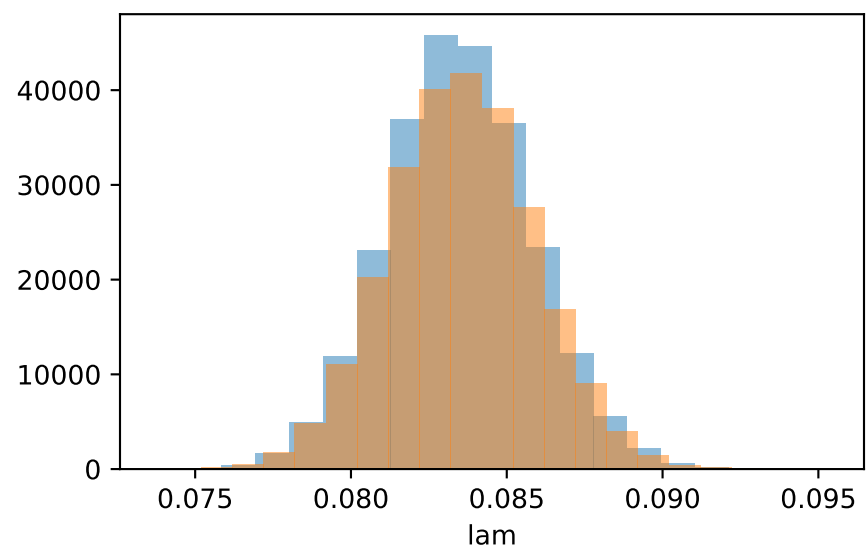

zero_i
300.0
297.5
295.0
292.5
290.0
287.5
285.0
282.5
chi
0
50000
100000
150000
200000
250000
iteration

one_i

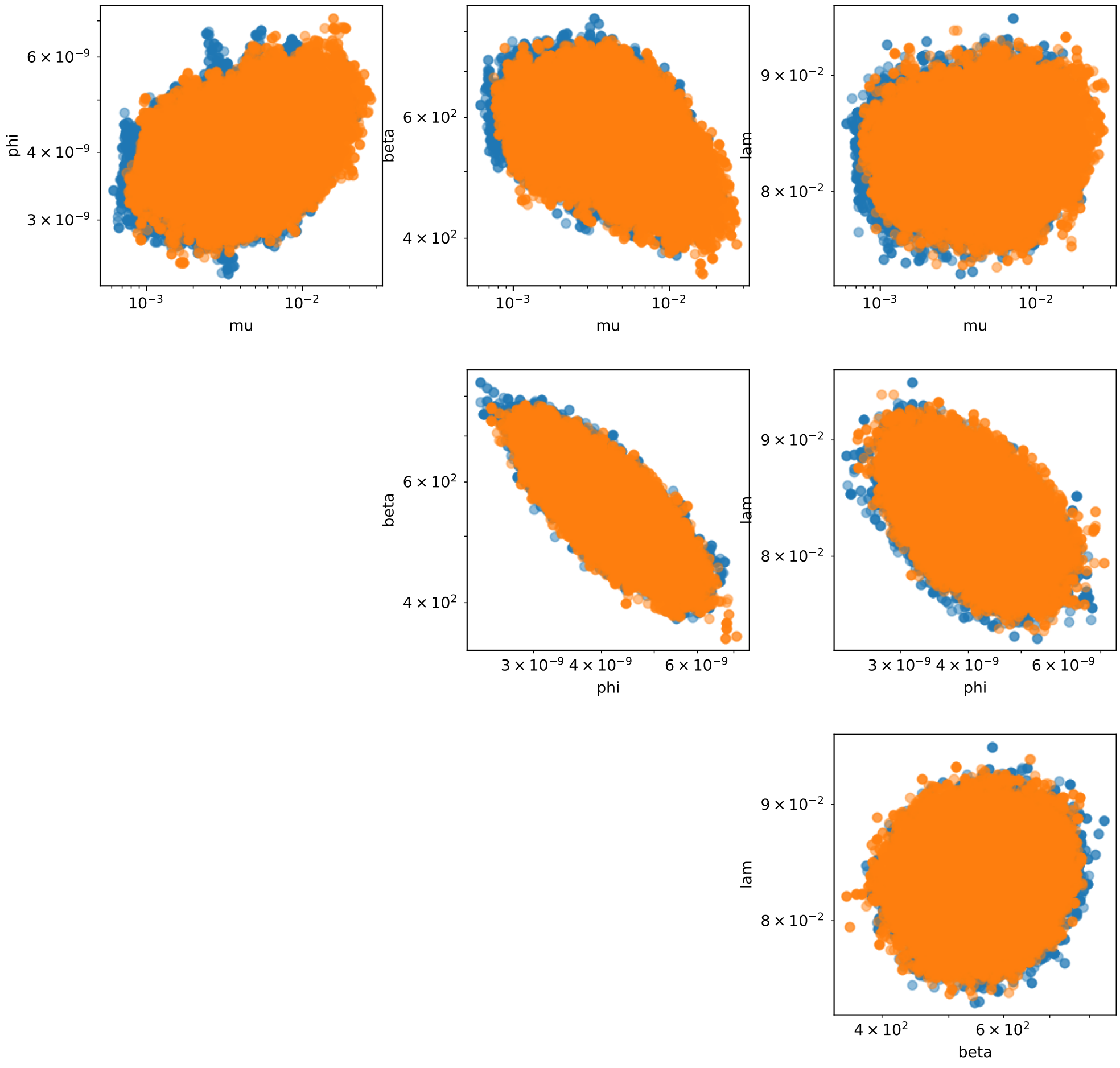

50000
40000
30000
20000
10000
0
0.000
0.005
0.010
0.015
0.020
0.025
mu

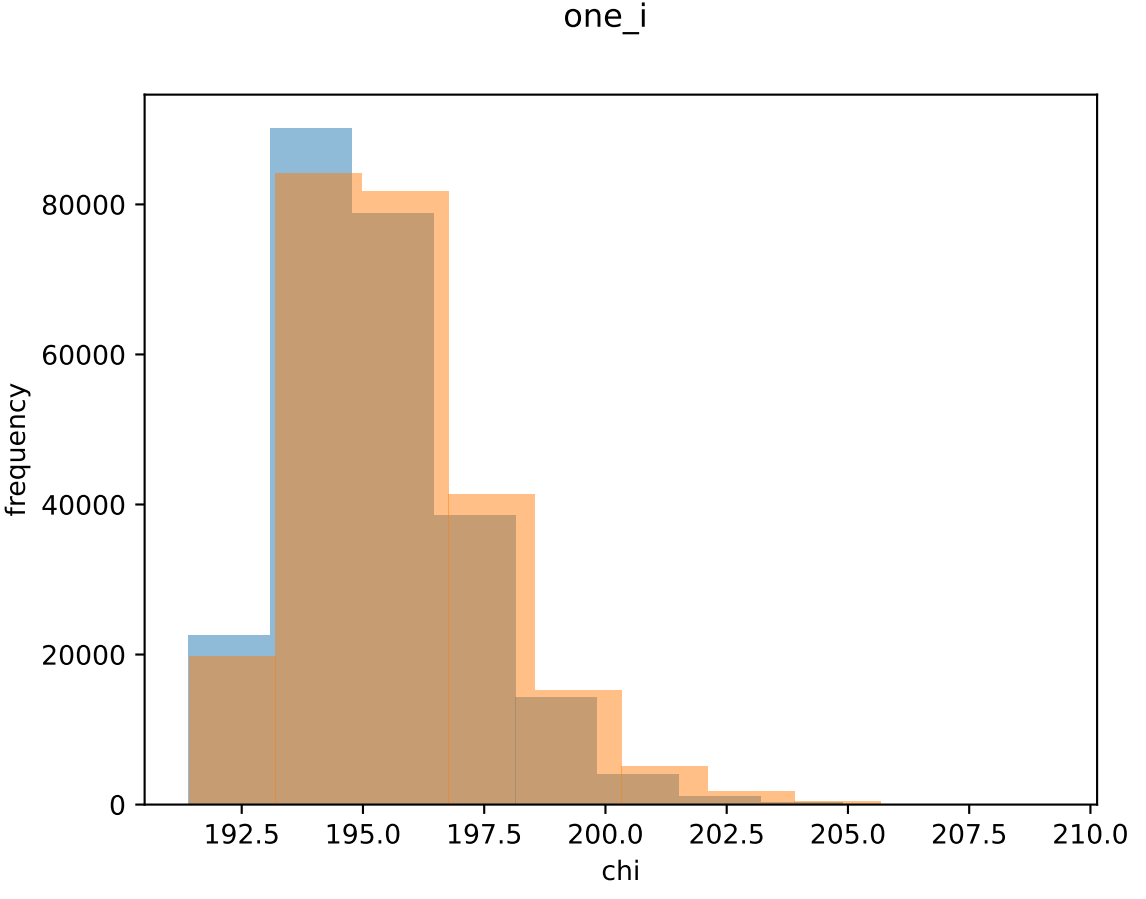

40000
30000
20000
10000
0
3
4
5
6
7
1e−9
phi

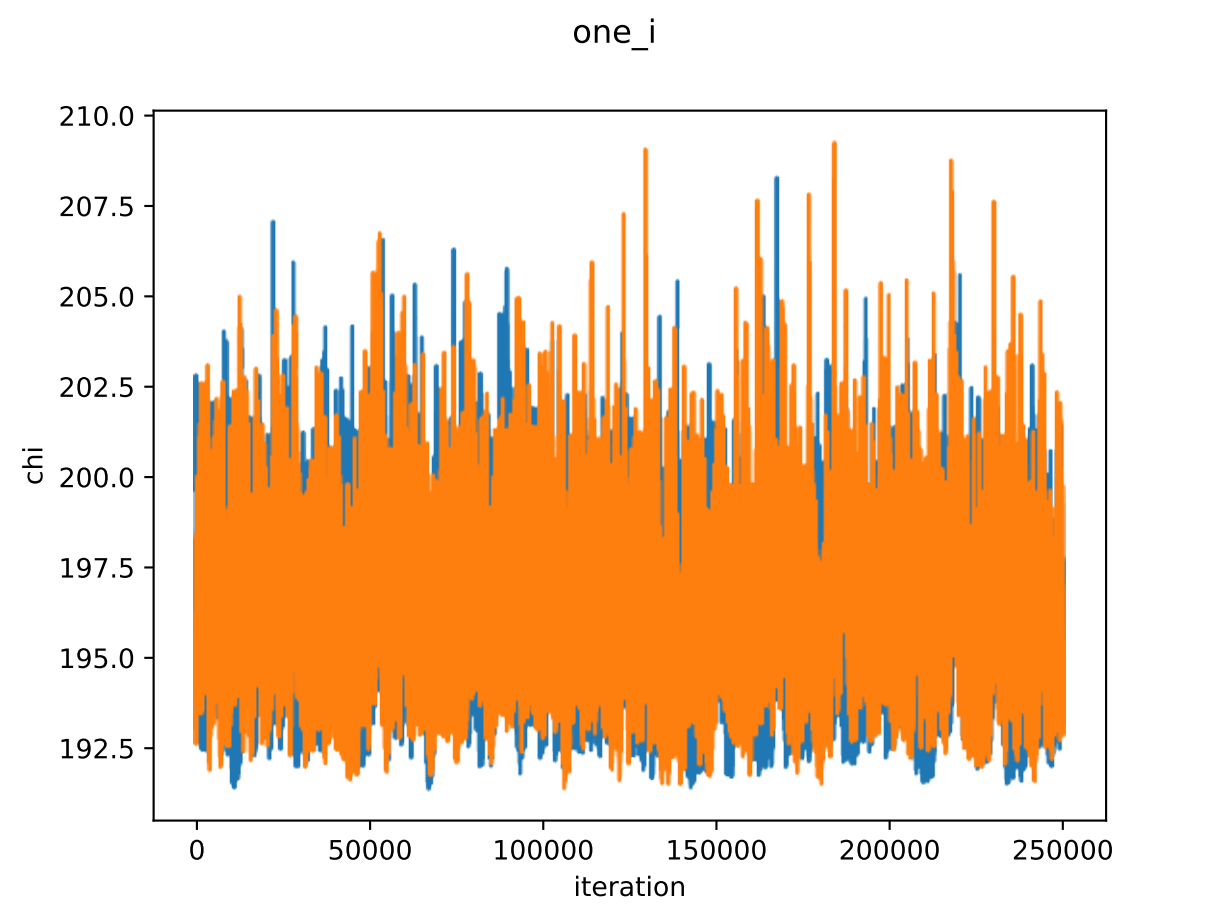

40000
30000
20000
10000
0
400
500
600
700
800
beta


40000
30000
20000
10000
0
0.075
0.080
0.085
0.090
0.095
lam

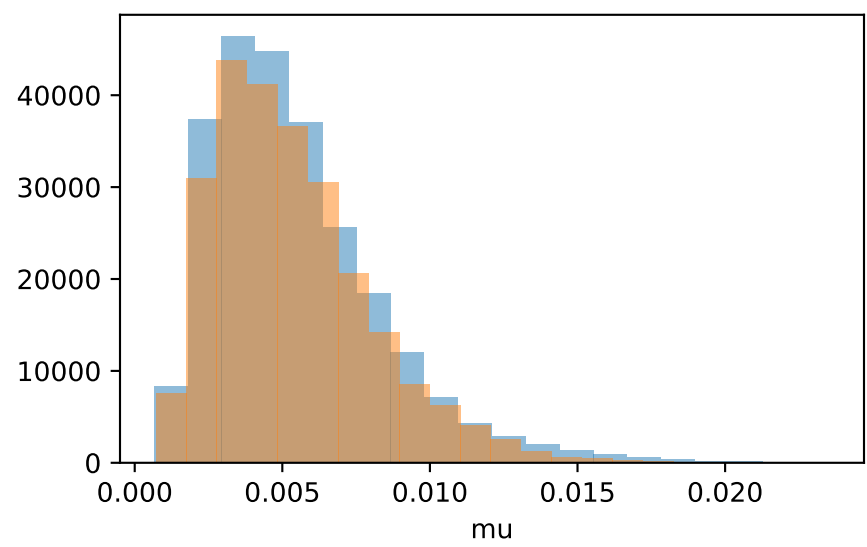
one_i

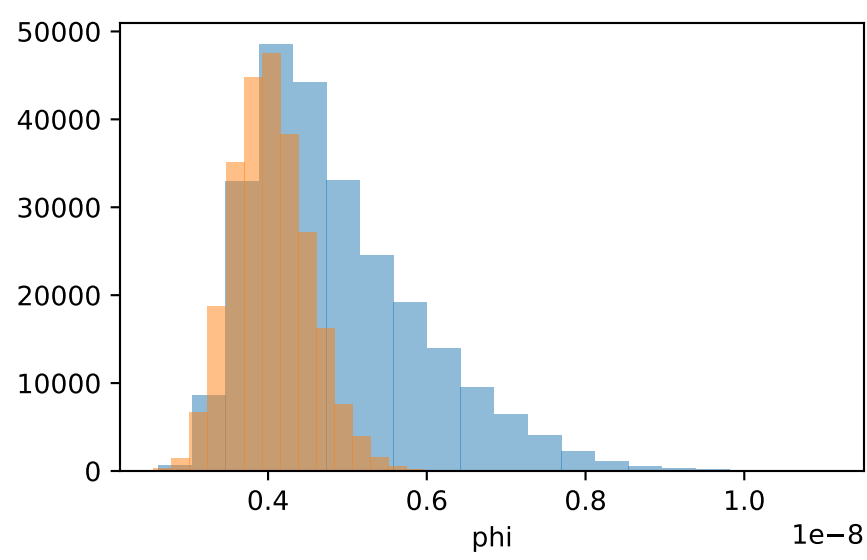


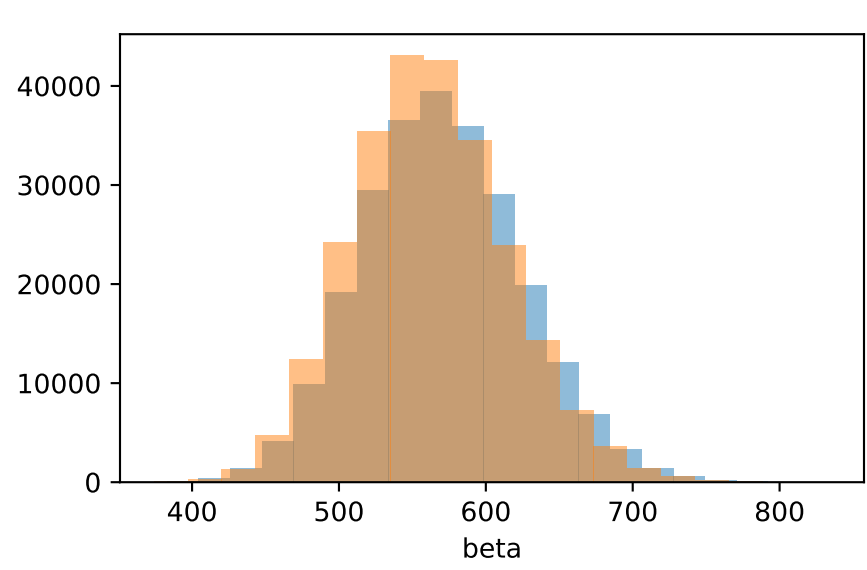

one_i
frequency
80000
60000
40000
20000
0
192.5
195.0
197.5
200.0
202.5
205.0
207.5
210.0
chi

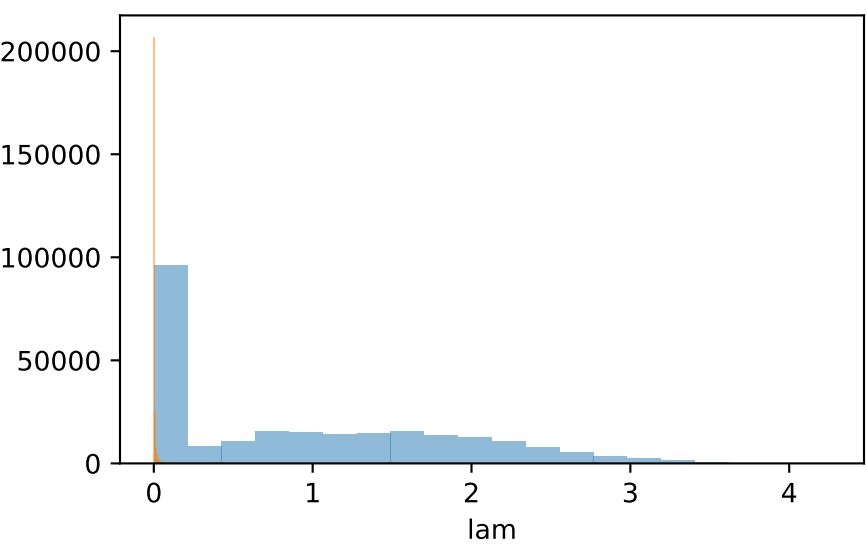

one_i
210.0
207.5
205.0
202.5
200.0
197.5
195.0
192.5
chi
0
50000
100000
150000
200000
250000
iteration

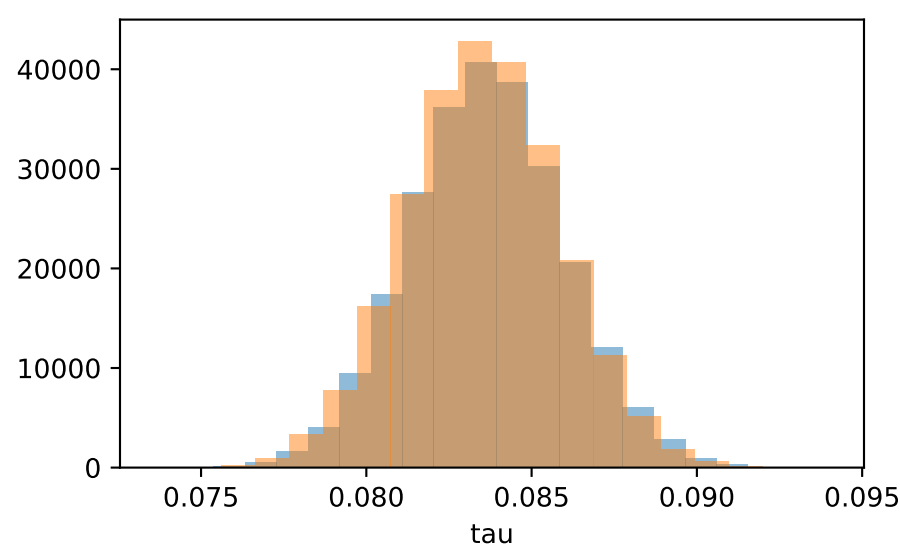
two_i


40000
30000
20000
10000
0
0.000
0.005
0.010
0.015
0.020
mu

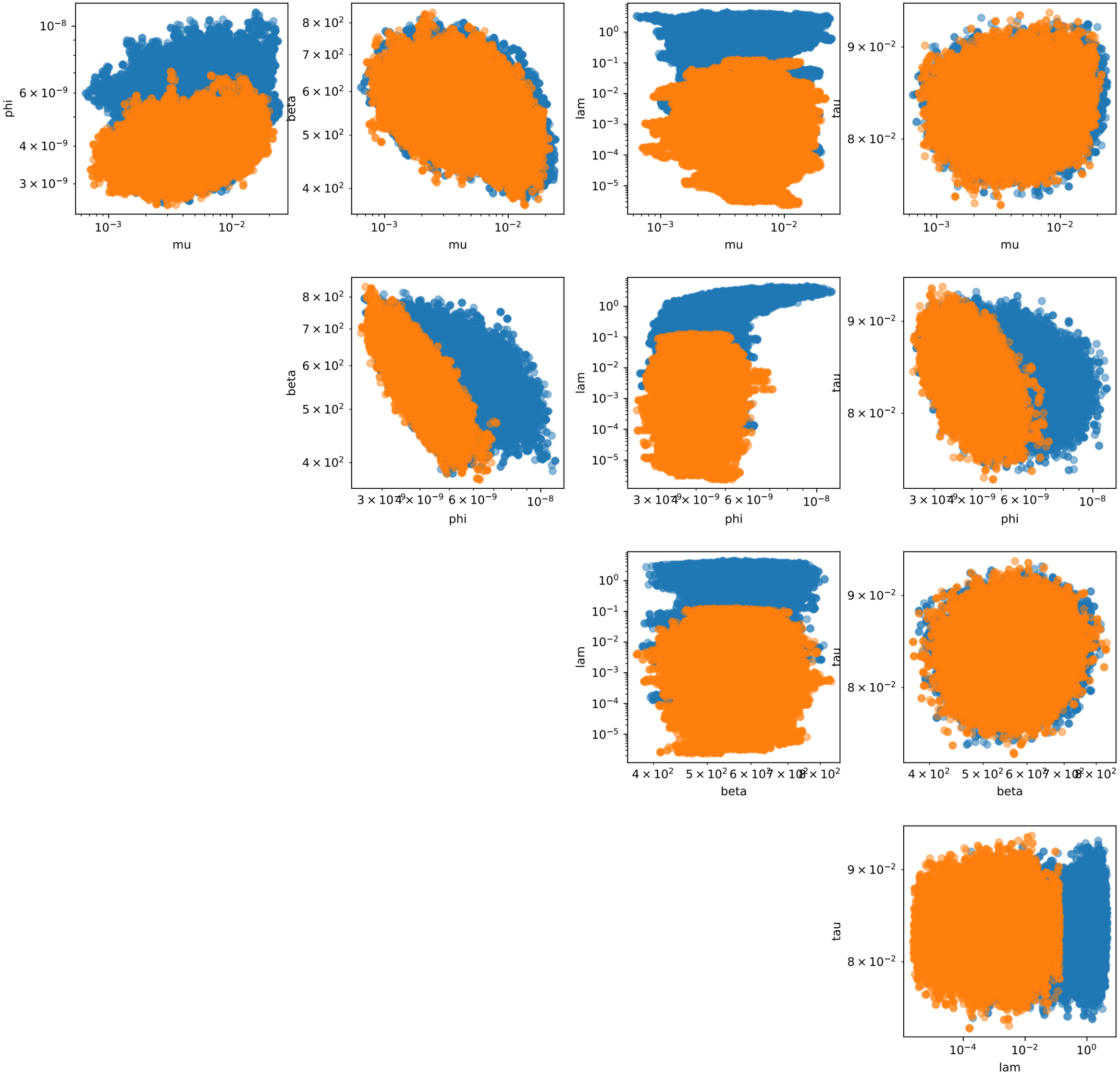

50000
40000
30000
20000
10000
0
0.4
0.6
0.8
1.0
phi
1e−8

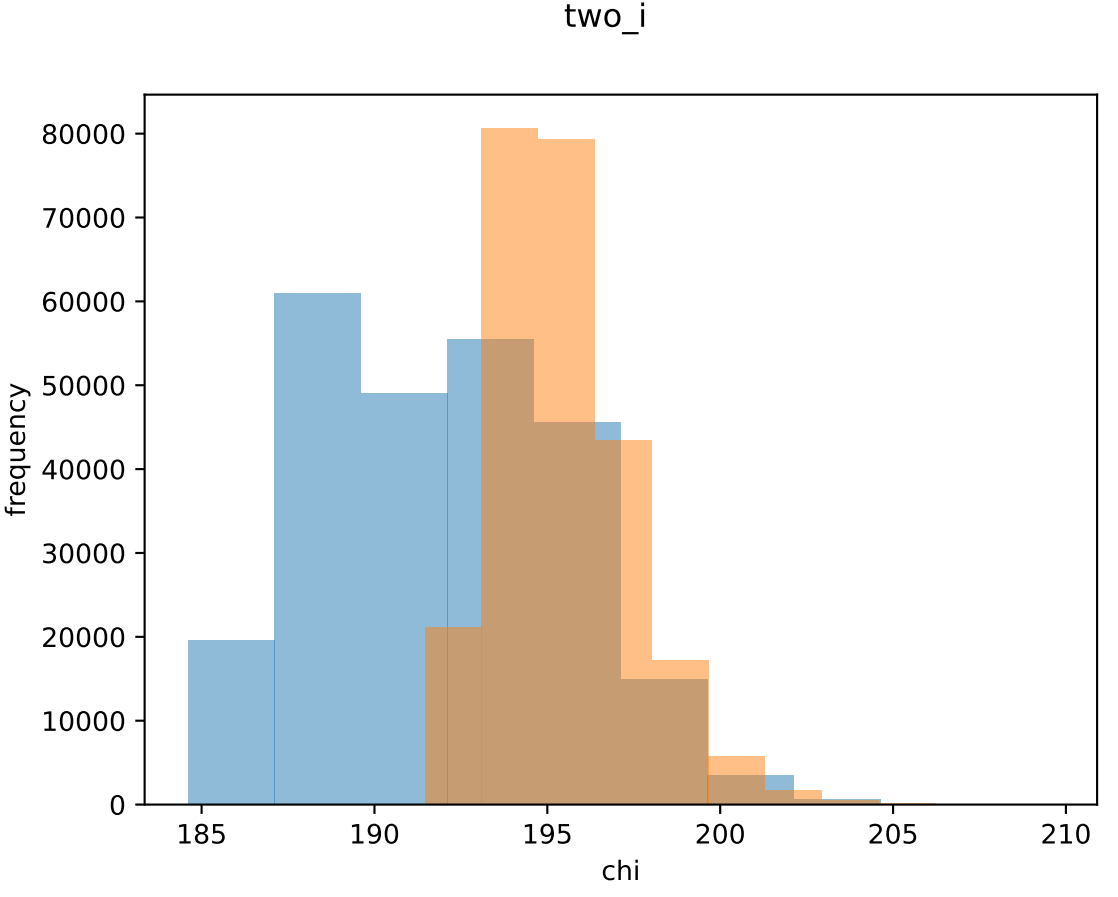

40000
30000
20000
10000
0
400
500
600
700
800
beta

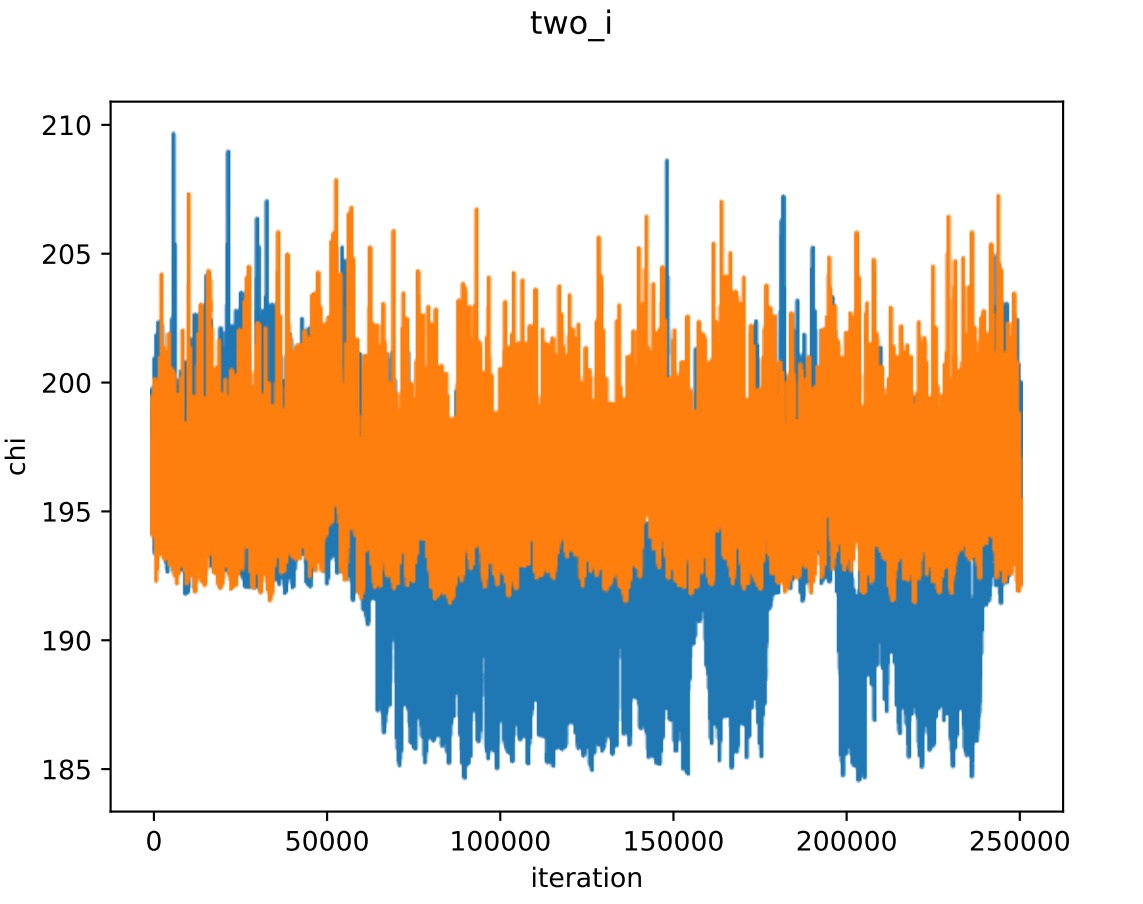

200000
150000
100000
50000
0
0
1
2
3
4
lam


40000
30000
20000
10000
0
0.075
0.080
0.085
0.090
0.095
tau

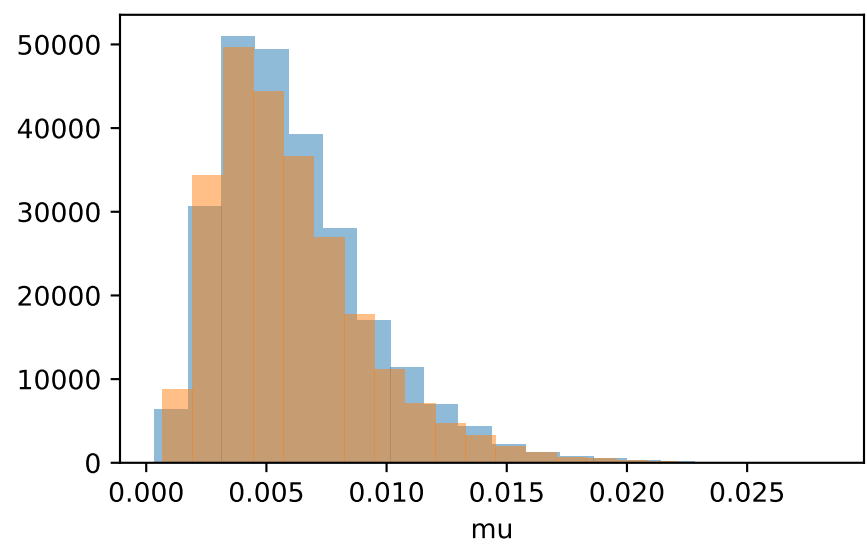
two_i

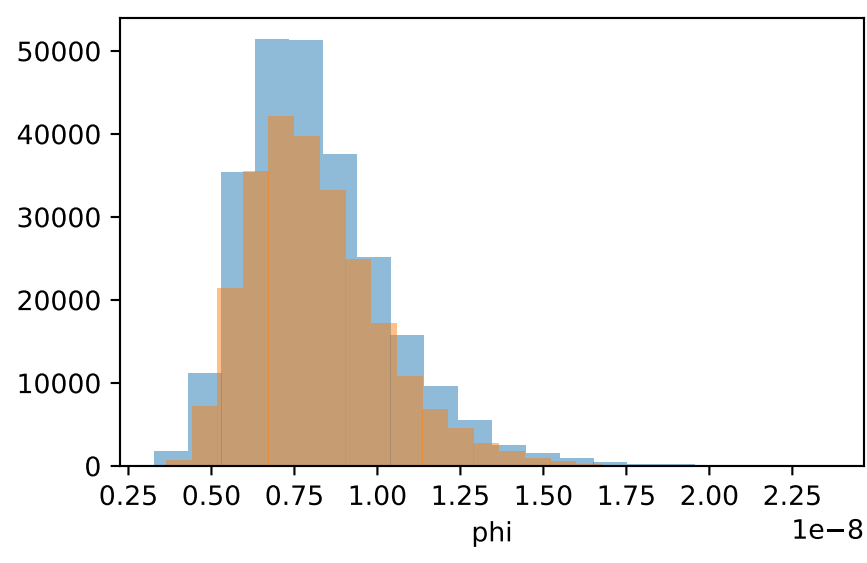


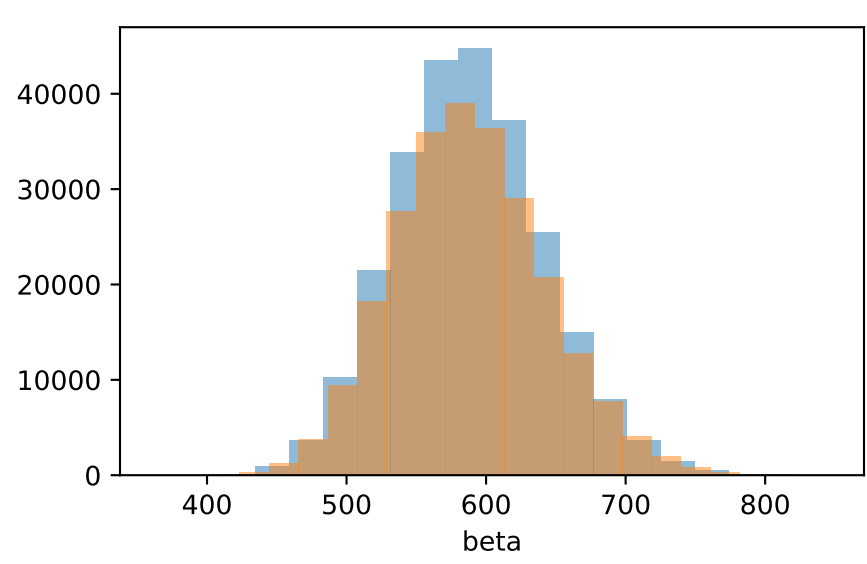

two_i
80000
70000
60000
50000
40000
30000
20000
10000
0
frequency
185
190
195
200
205
210
chi

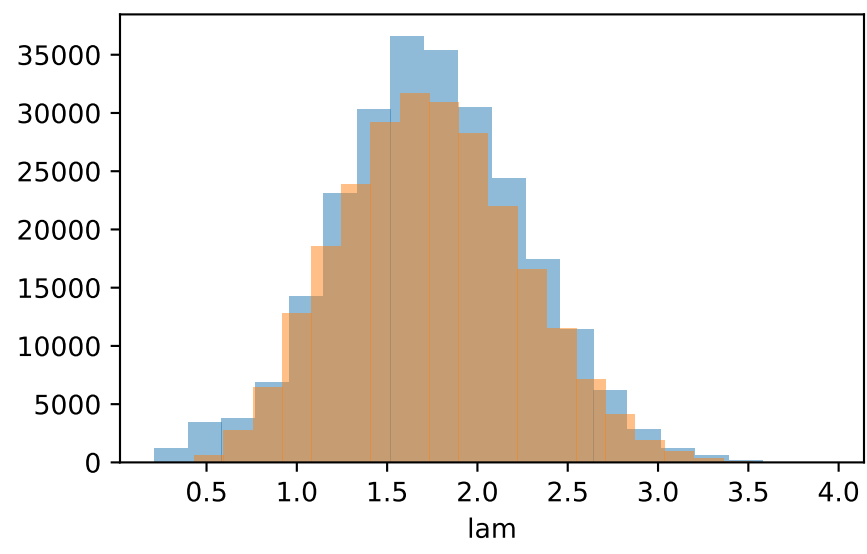

two_i
chi
iteration
210
205
200
195
190
185
0
50000
100000
150000
200000
250000

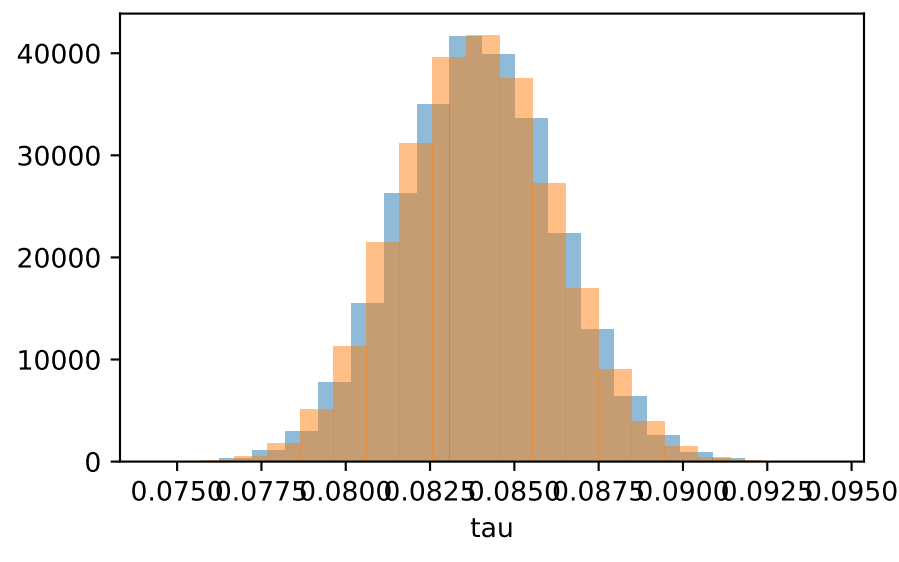
three_i


50000
40000
30000
20000
10000
0
0.000
0.005
0.010
0.015
0.020
0.025
mu

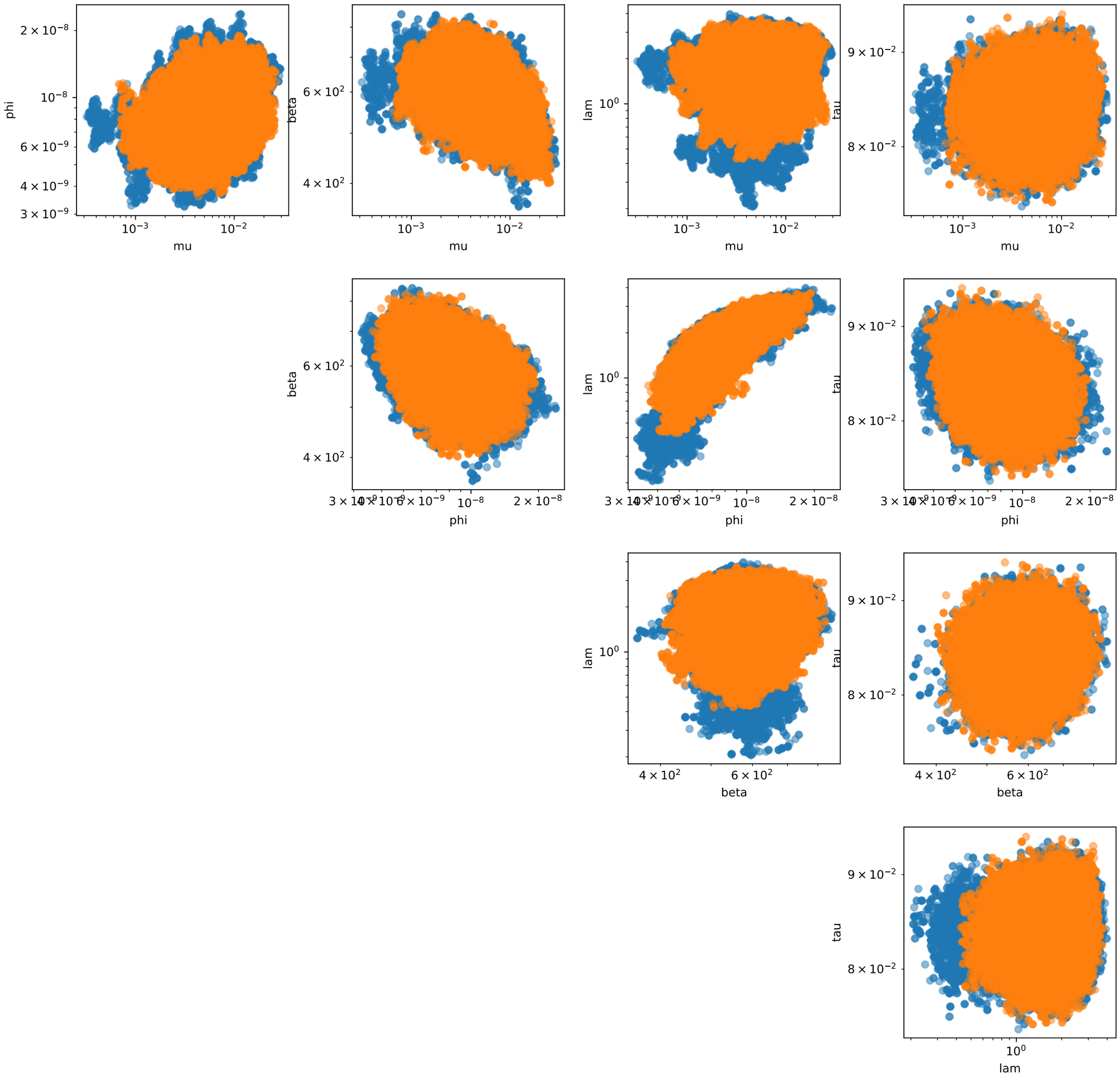

50000
40000
30000
20000
10000
0
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00
2.25
phi
1e−8

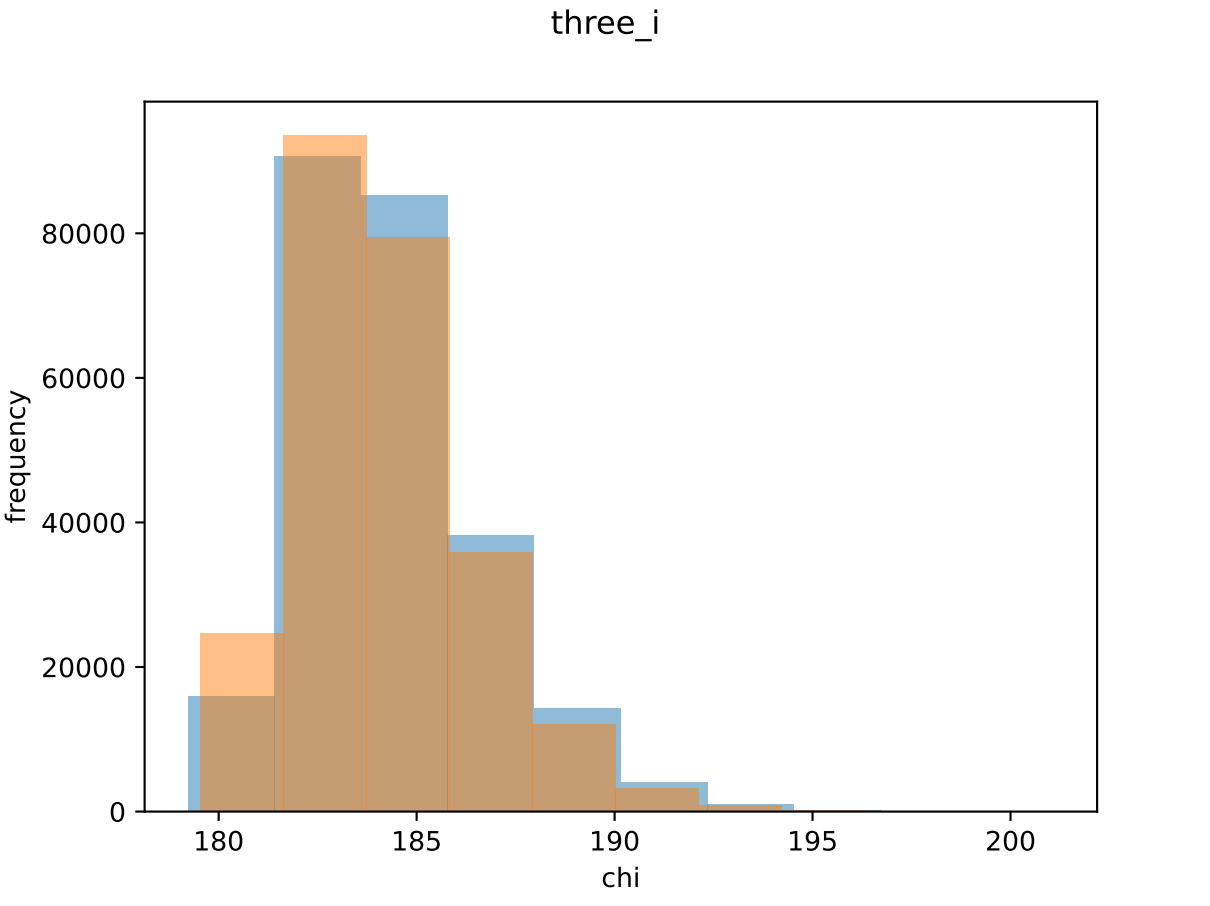

40000
30000
20000
10000
0
400
500
600
700
800
beta

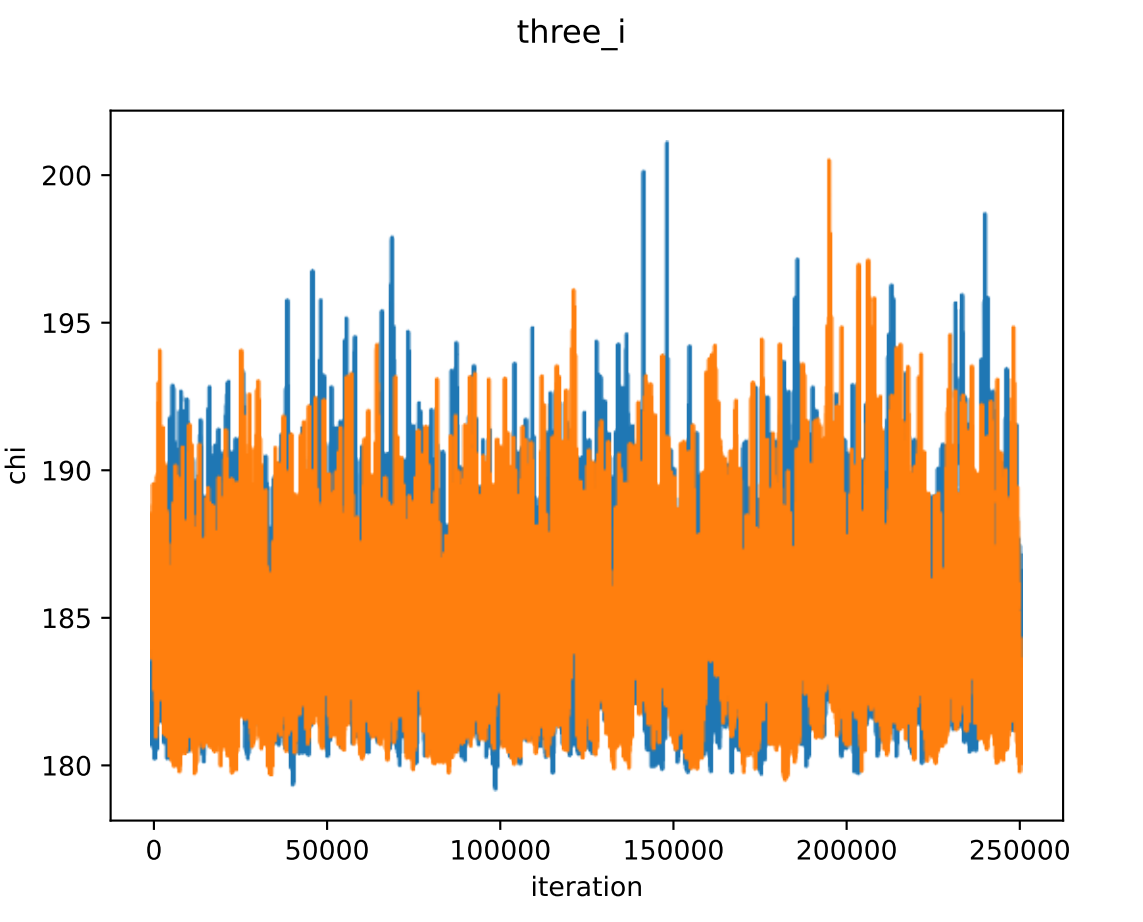

35000
30000
25000
20000
15000
10000
5000
0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
lam


40000
30000
20000
10000
0
0.0750
0.0775
0.0800
0.0825
0.0850
0.0875
0.0900
0.0925
0.0950
tau

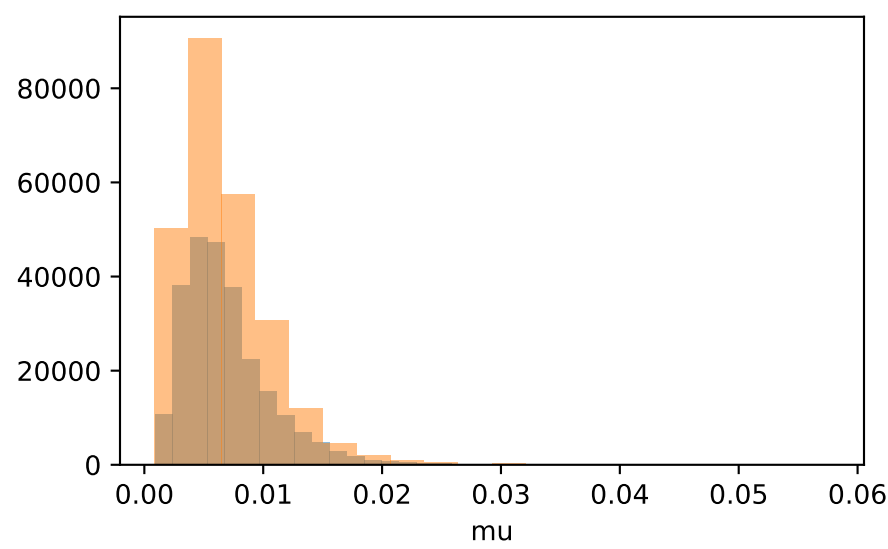
three_i

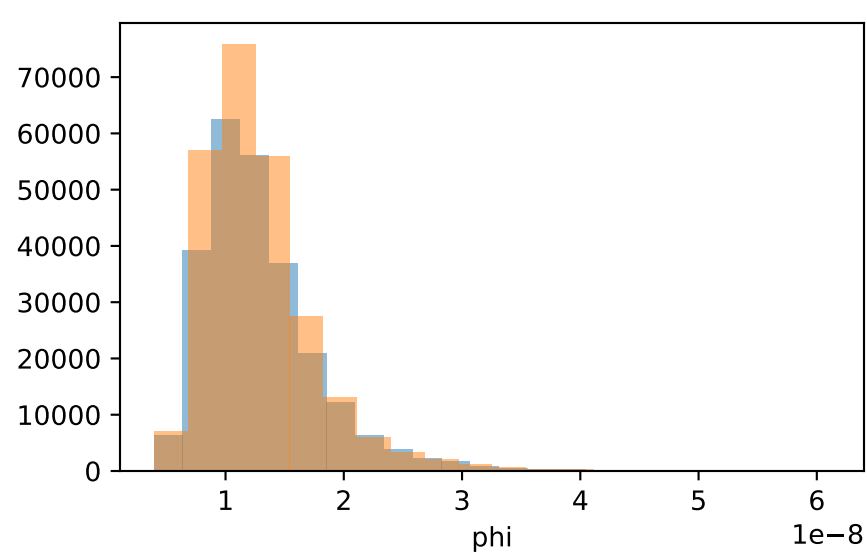


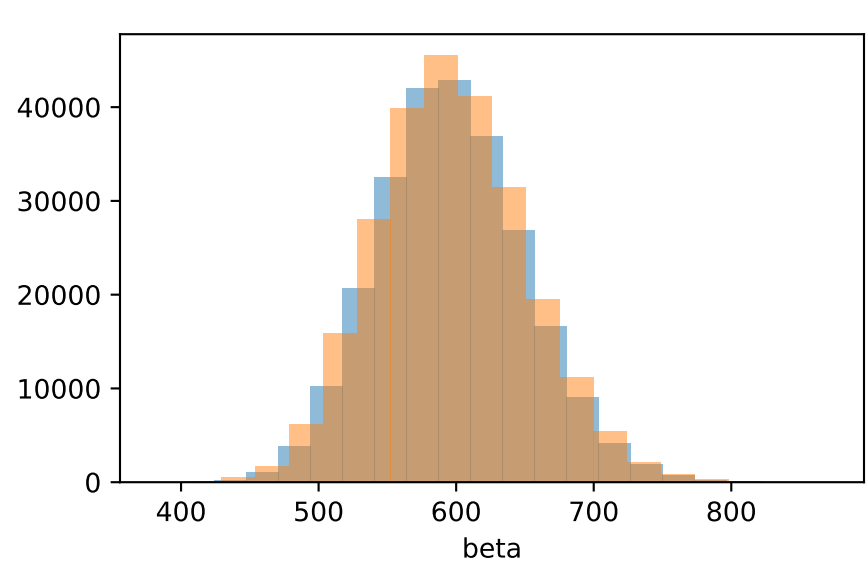

three_i
80000
60000
40000
20000
0
frequency
180
185
190
195
200
chi

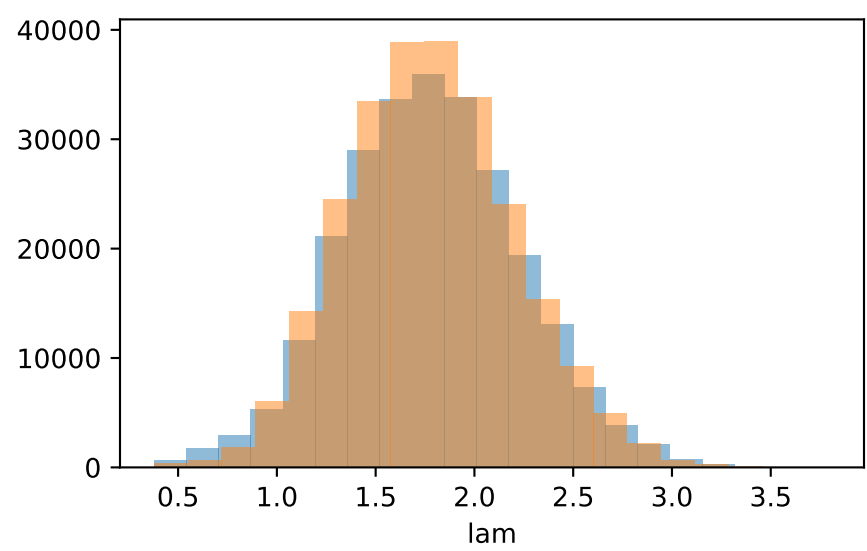

three_i
chi
iteration
200
195
190
185
180
0
50000
100000
150000
200000
250000

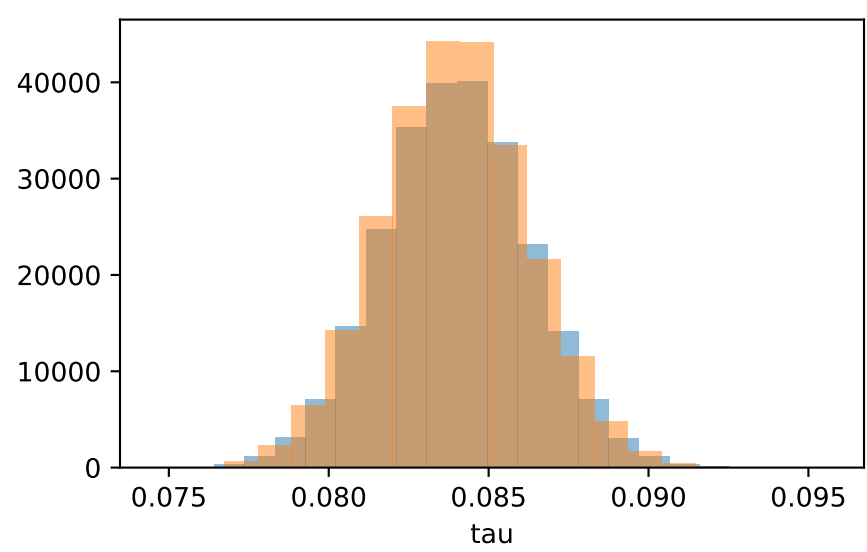
four_i


80000
60000
40000
20000
0
0.00
0.01
0.02
0.03
0.04
0.05
0.06
mu

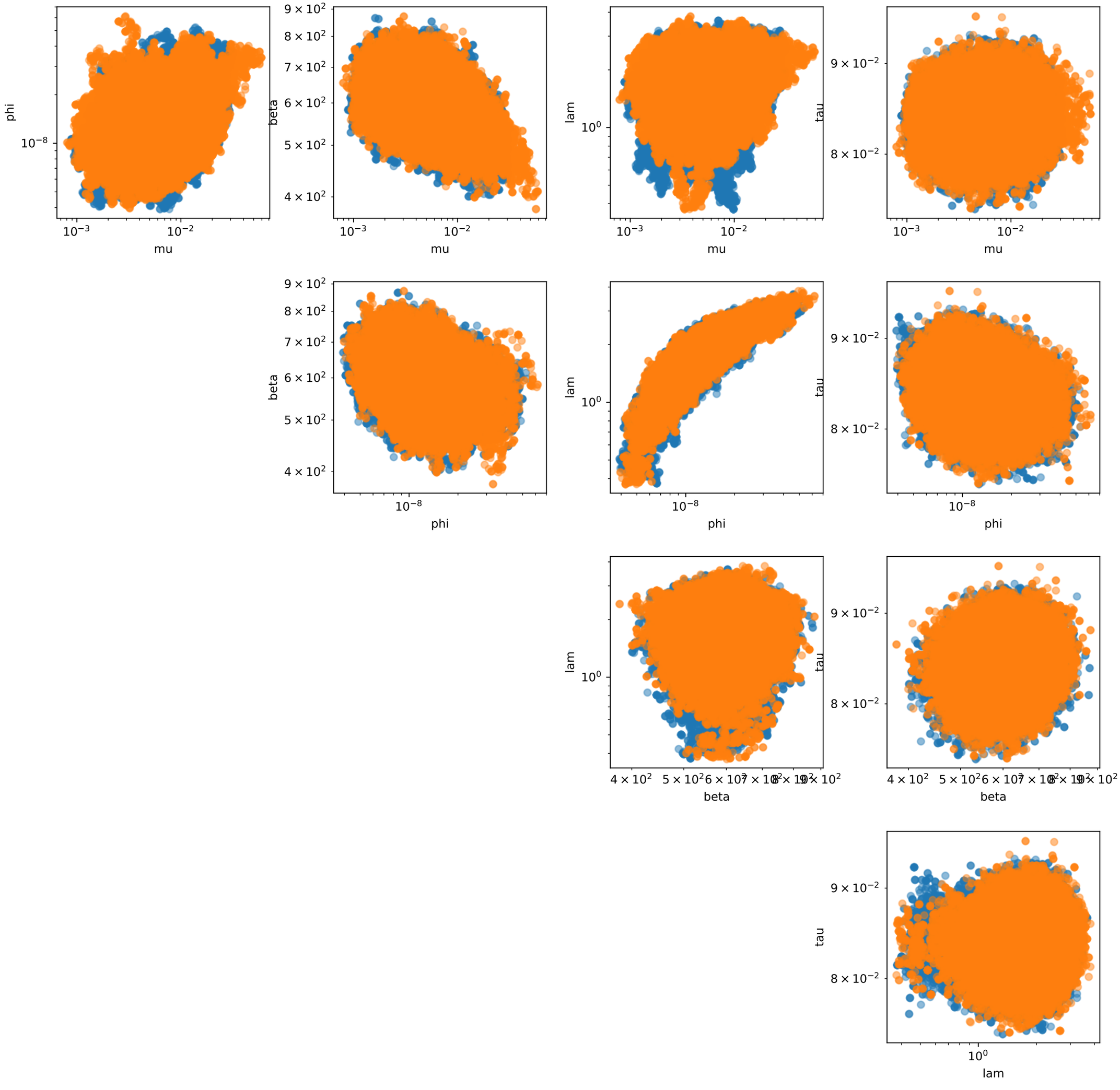

70000
60000
50000
40000
30000
20000
10000
0
1
2
3
4
5
6
phi
1e−8

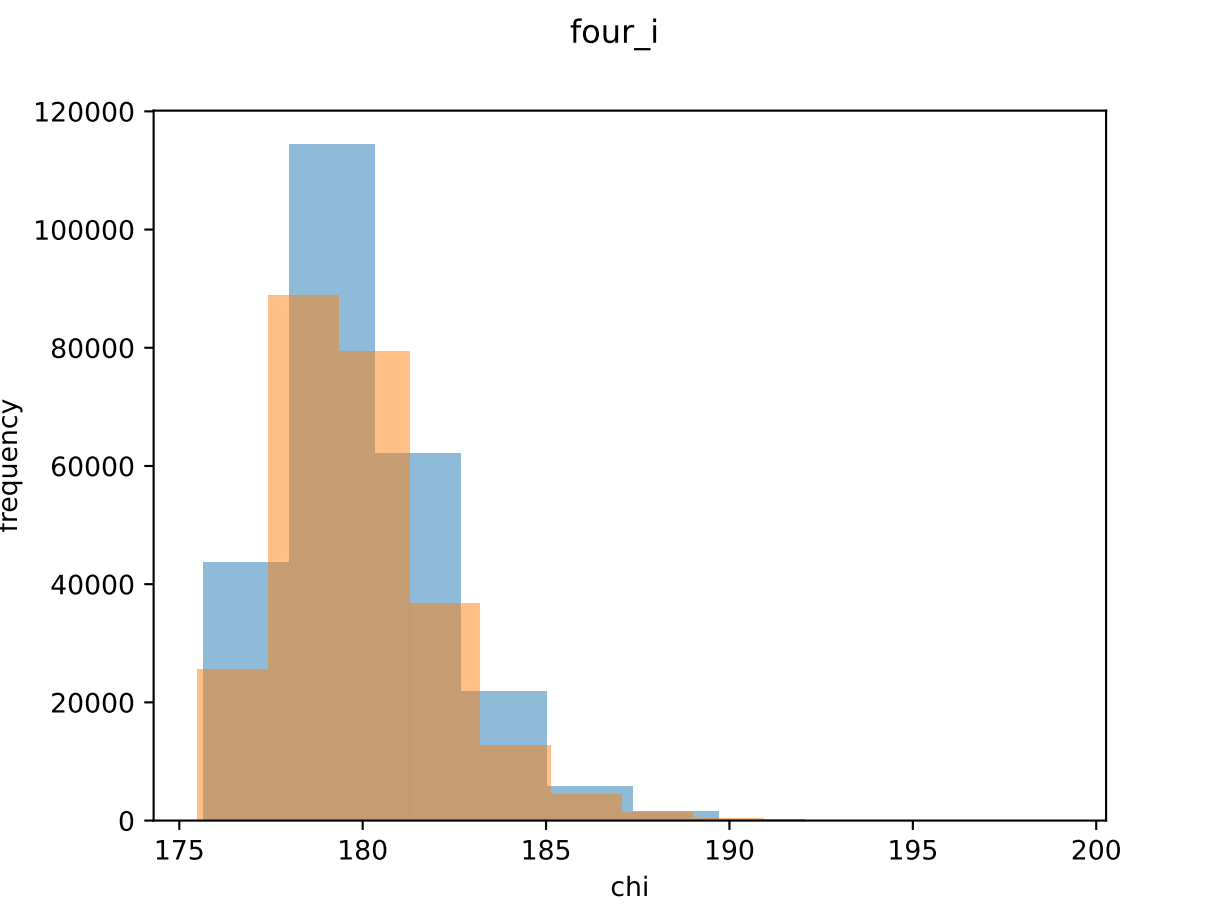

40000
30000
20000
10000
0
400
500
600
700
800
beta

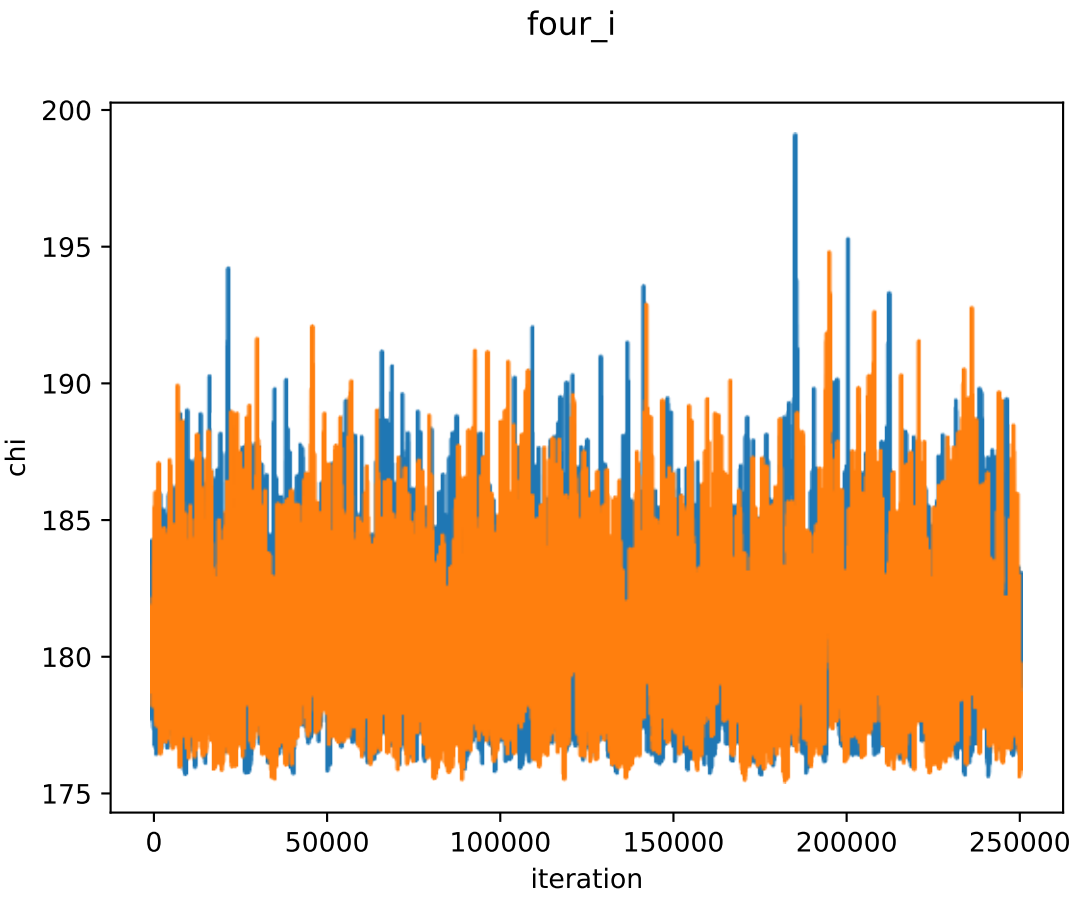

40000
30000
20000
10000
0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
lam


40000
30000
20000
10000
0
0.075
0.080
0.085
0.090
0.095
tau

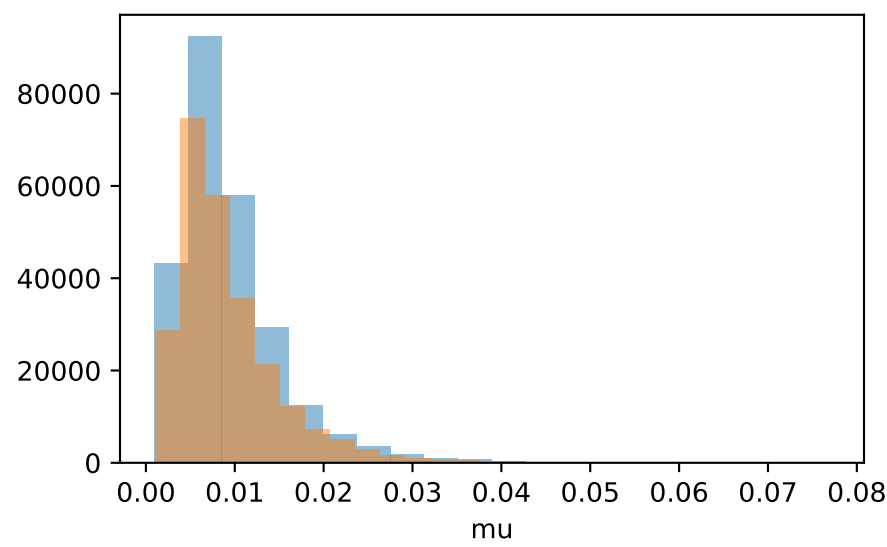
four_i




four_i
120000
100000
80000
60000
40000
20000
0
frequency
175
180
185
190
195
200
chi


four_i
200
195
190
185
180
175
chi
0
50000
100000
150000
200000
250000
iteration

five_i


80000
60000
40000
20000
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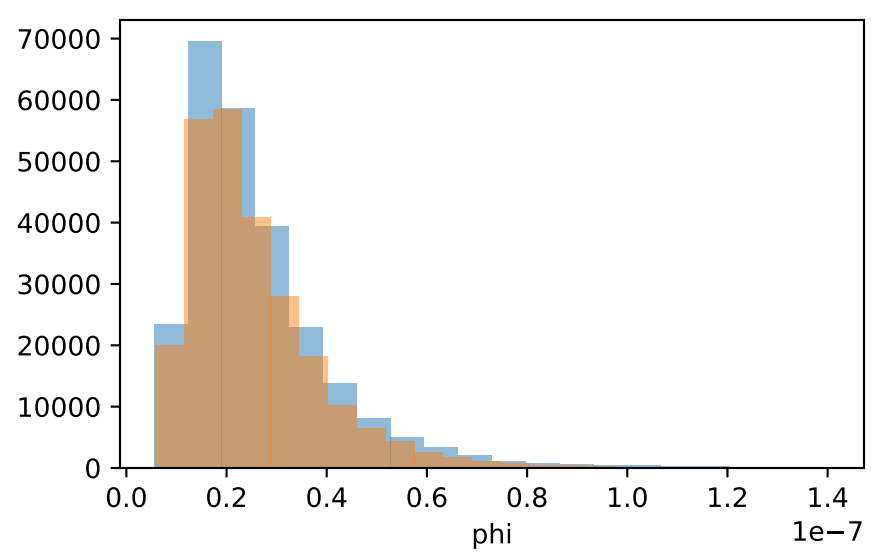
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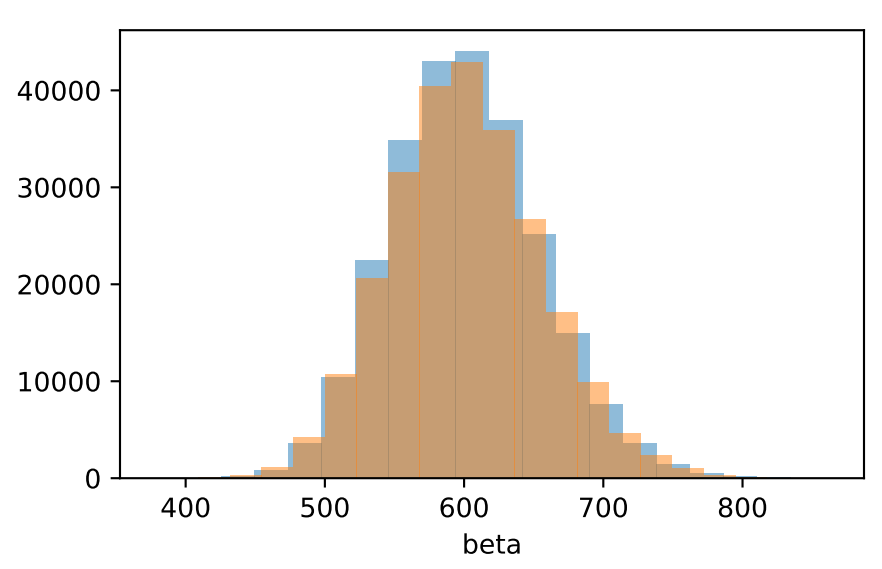
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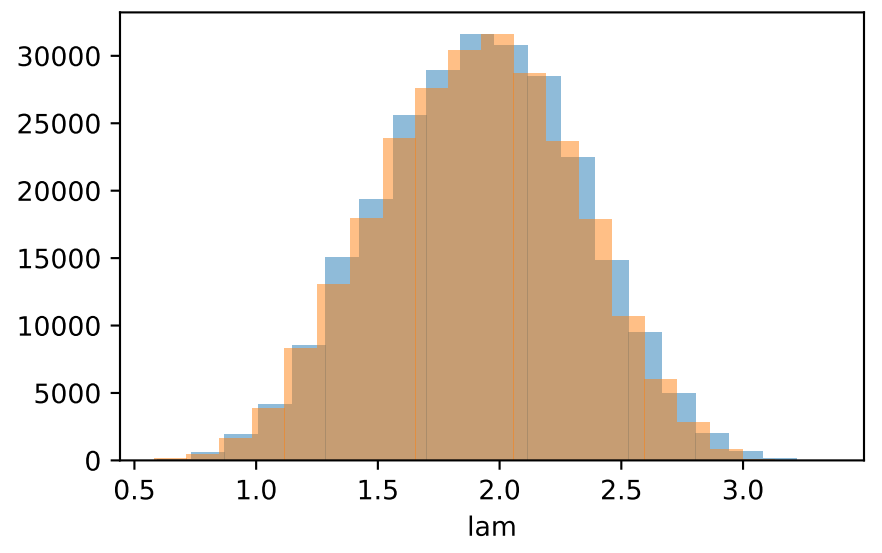
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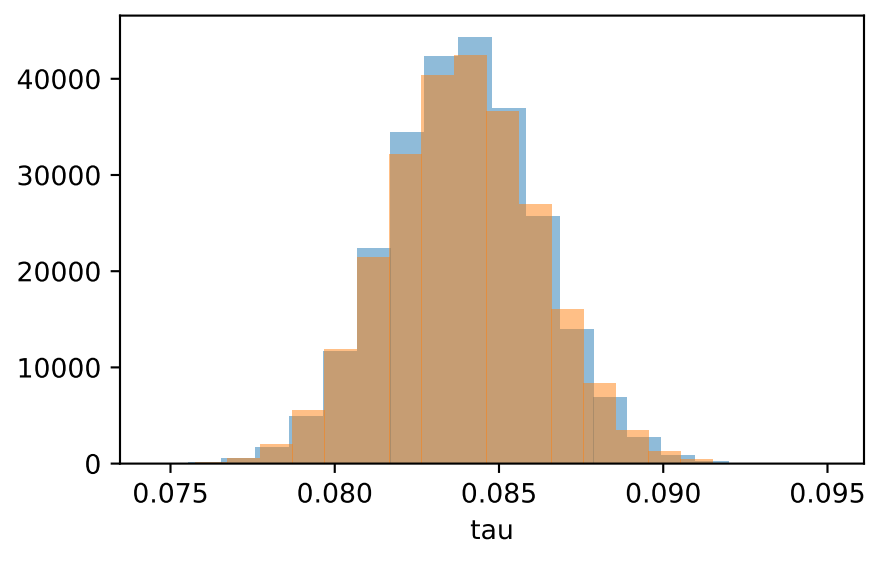
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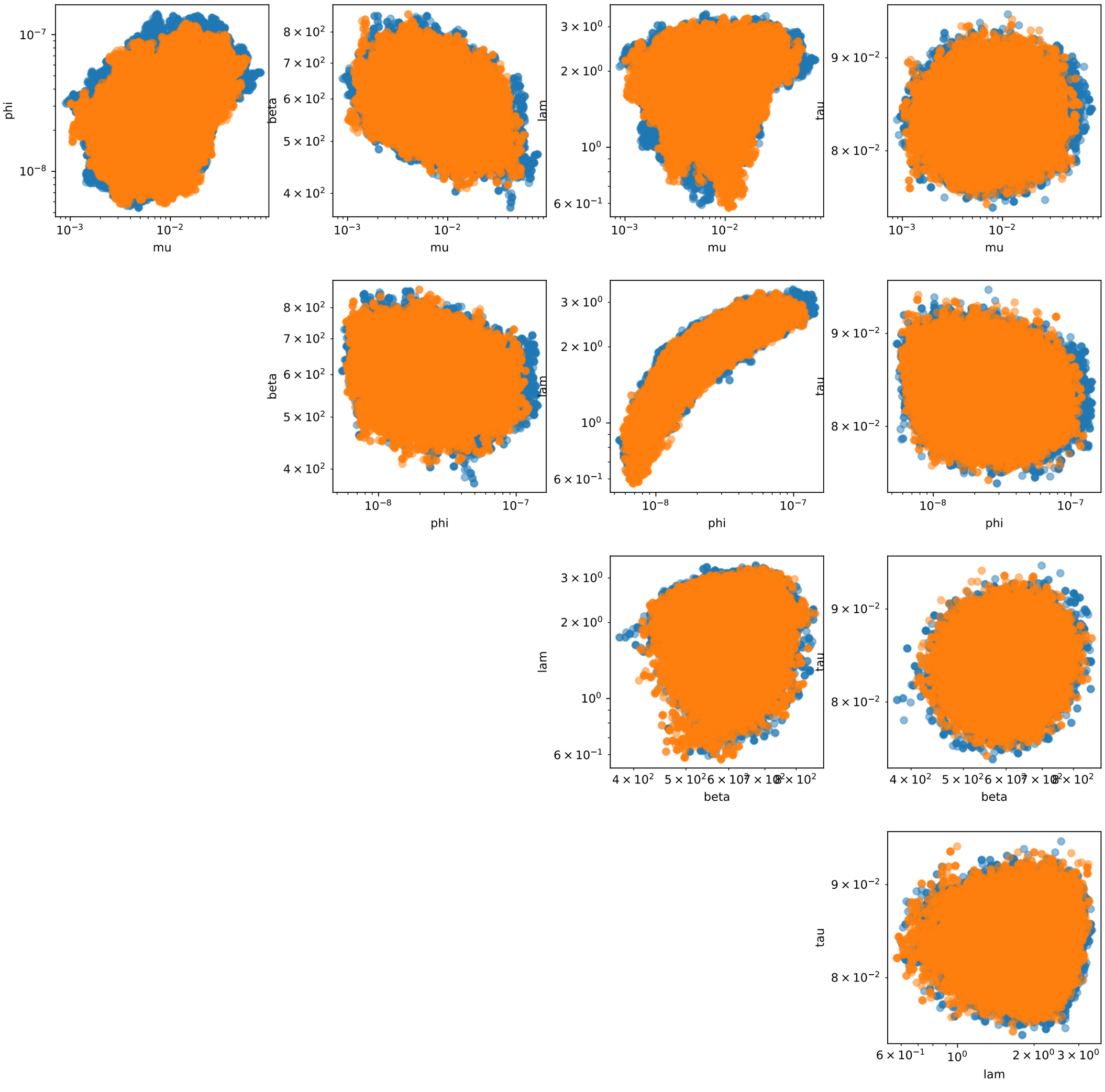

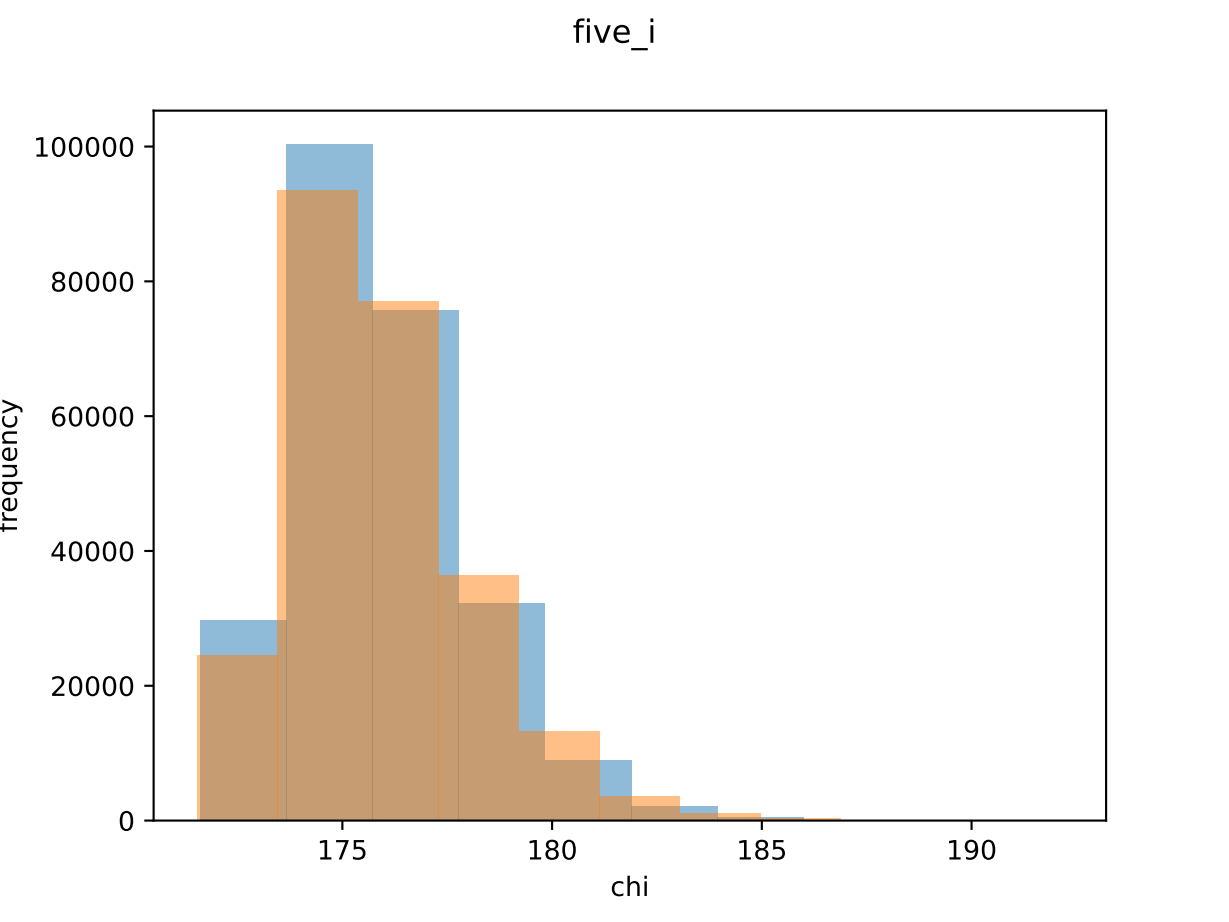
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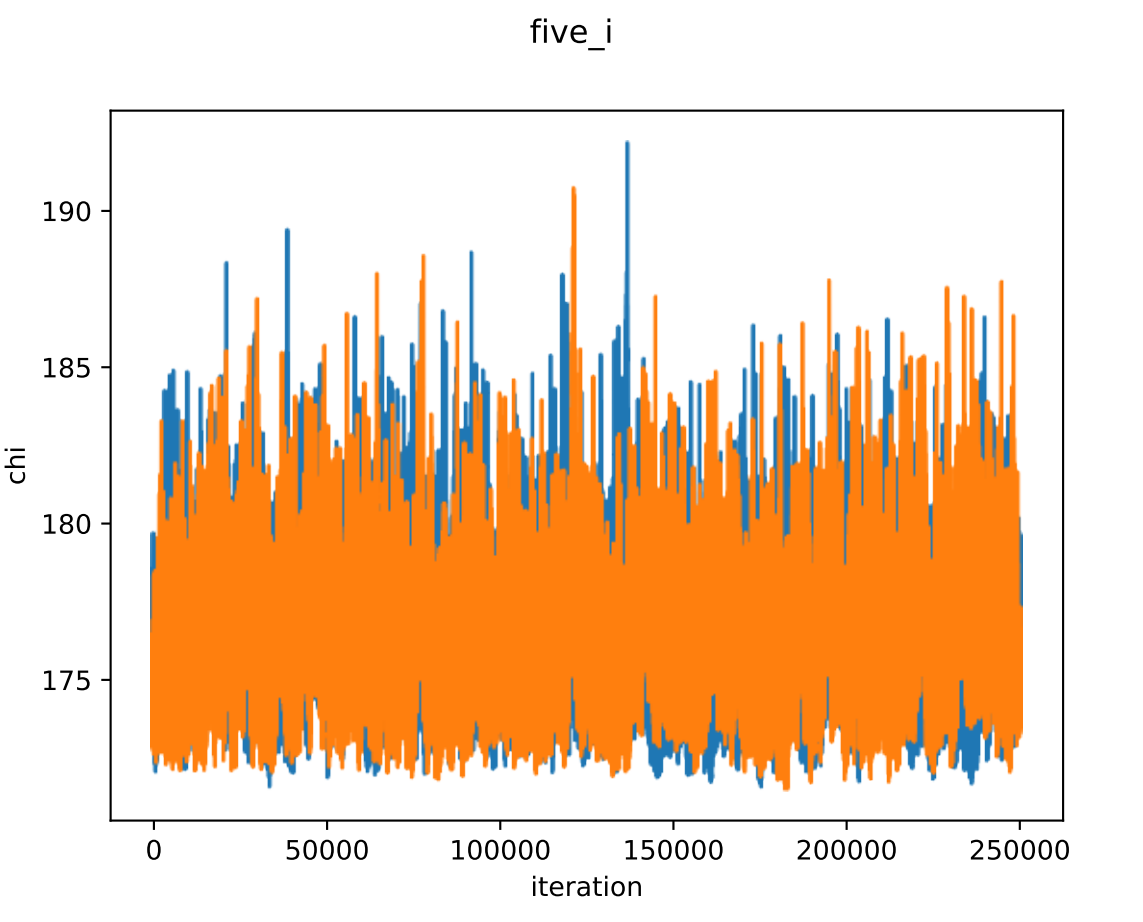
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