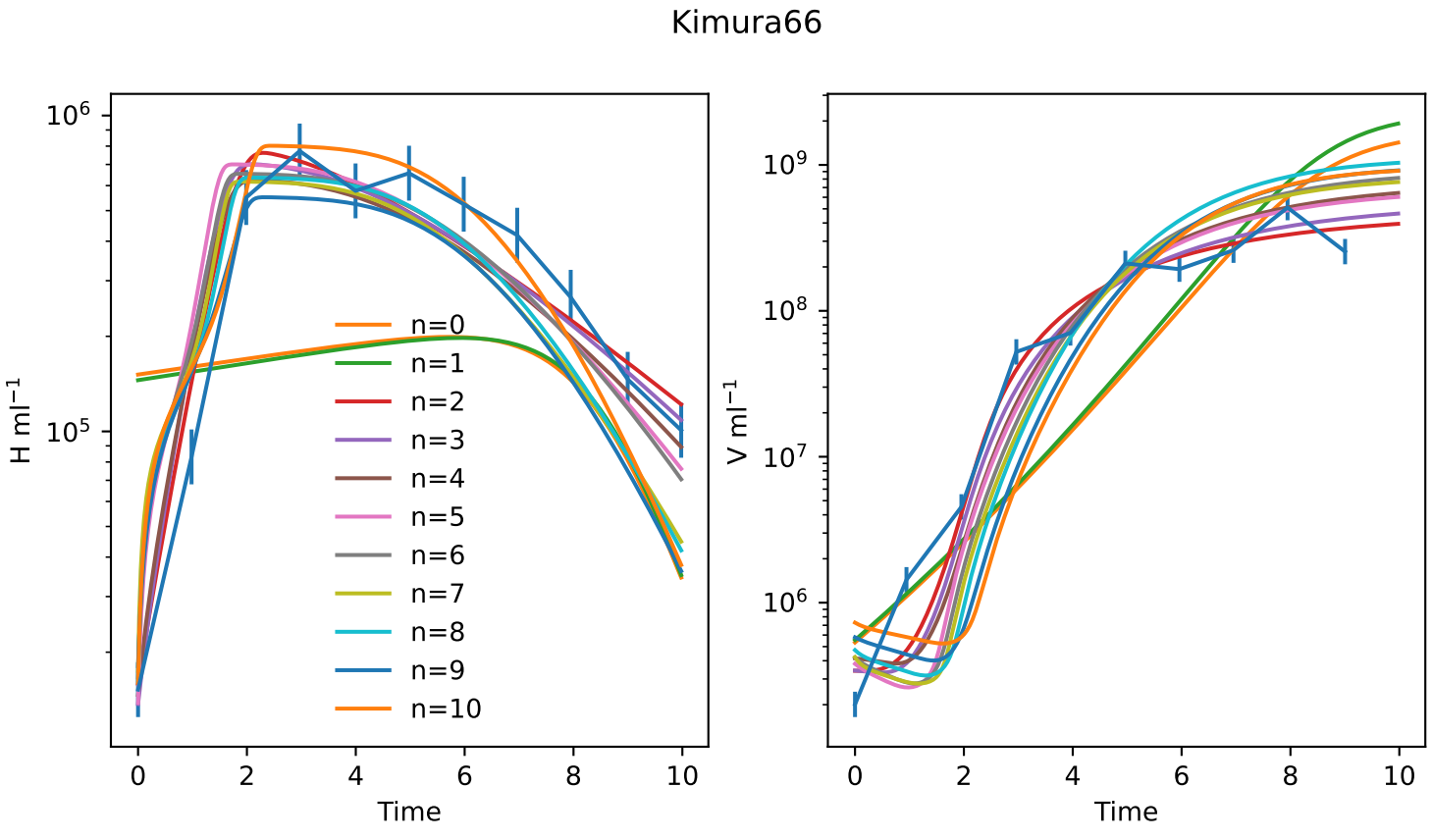
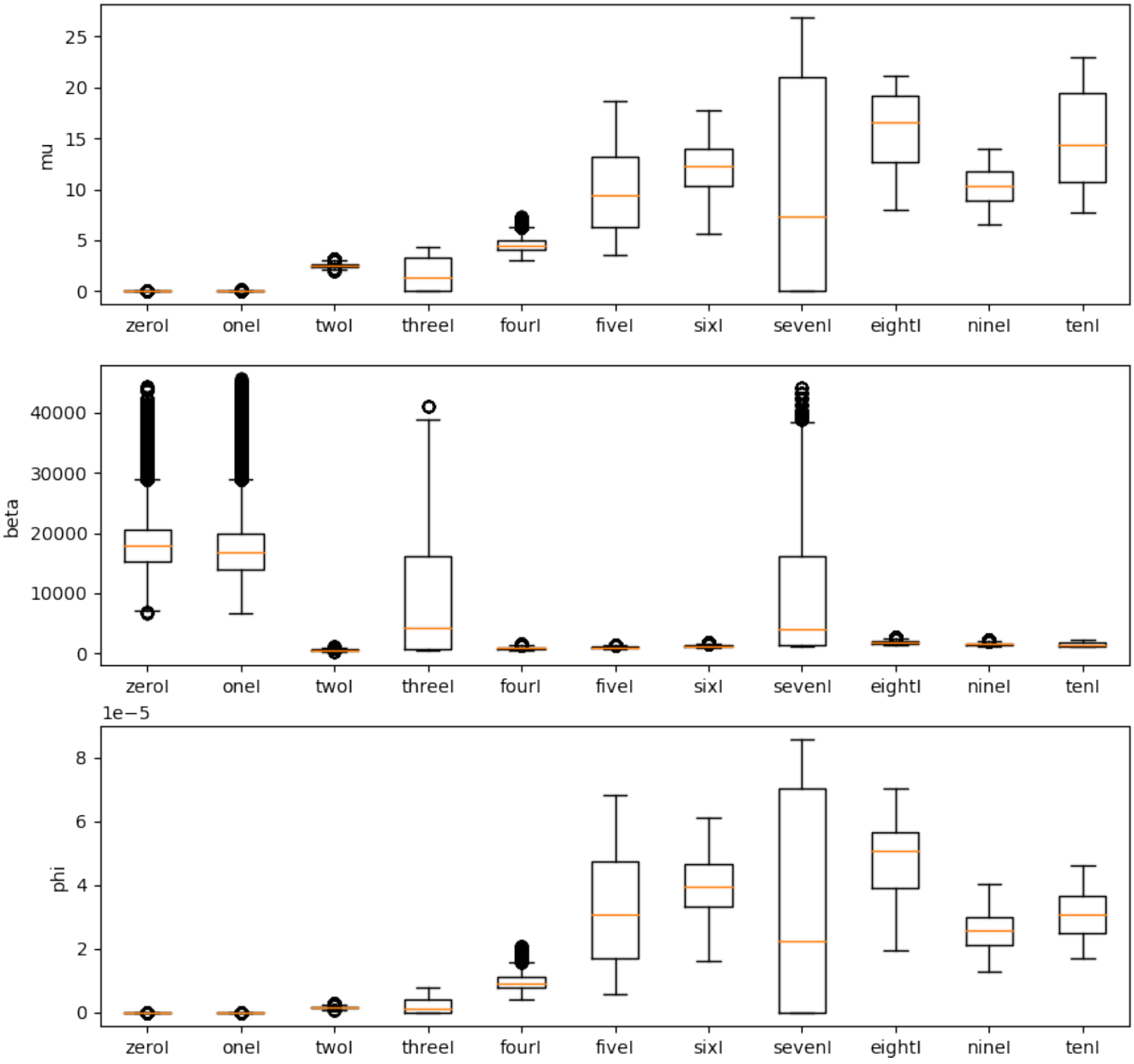
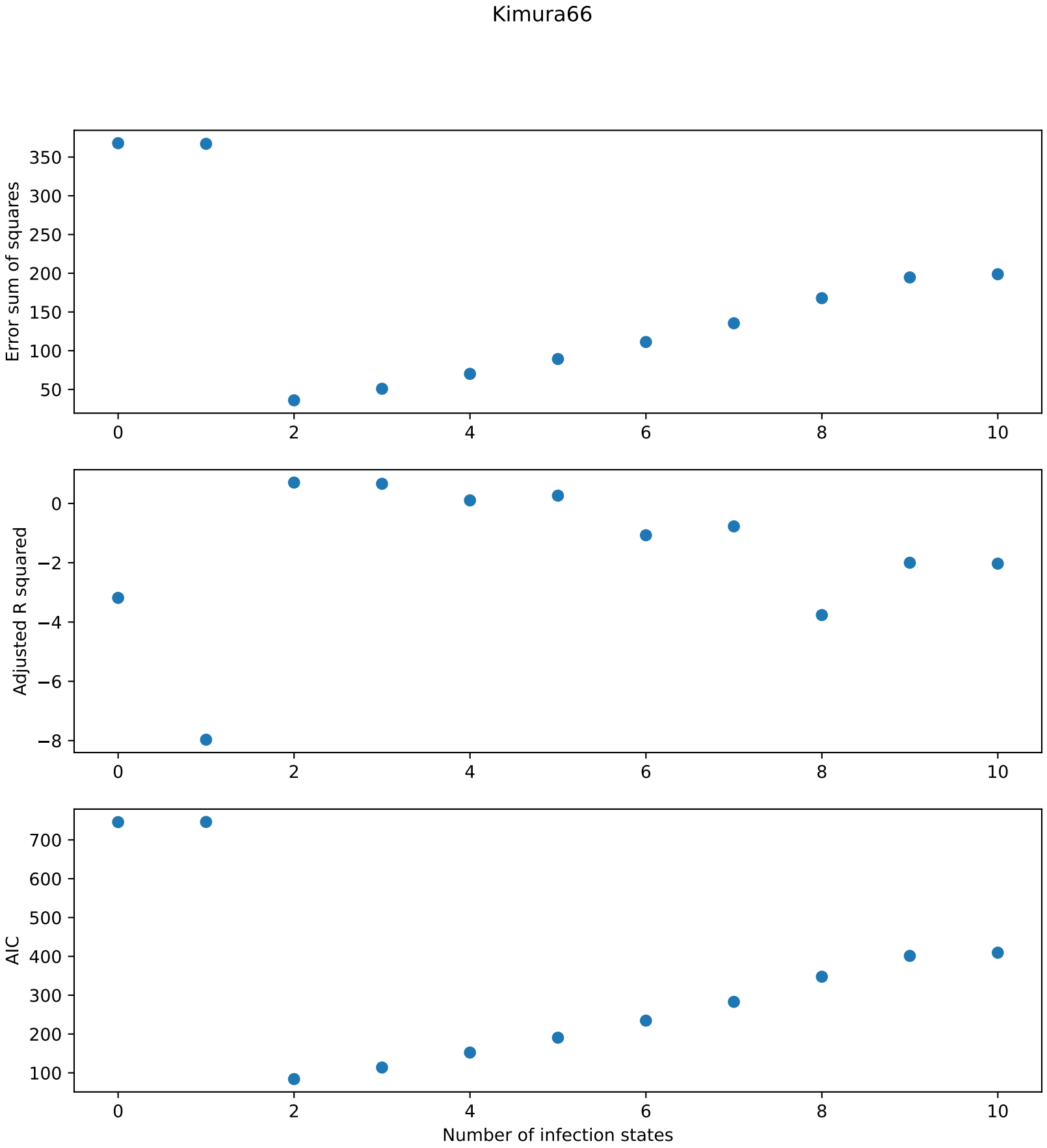
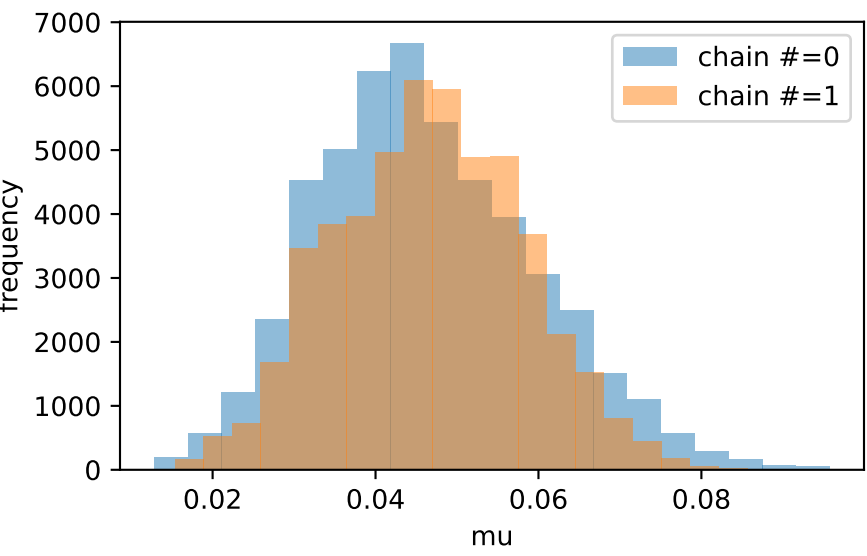

Kimura66
H ml^{-1}
10^6
10^5
n=0
n=1
n=2
n=3
n=4
n=5
n=6
n=7
n=8
n=9
n=10
0
2
4
6
8
10
Time
V ml^{-1}
10^9
10^8
10^7
10^6
0
2
4
6
8
10
Time

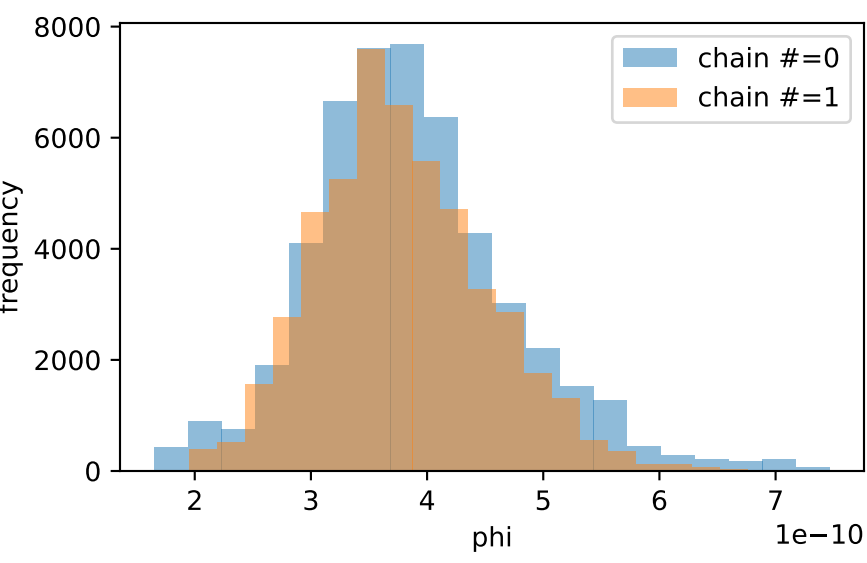
Kimura66

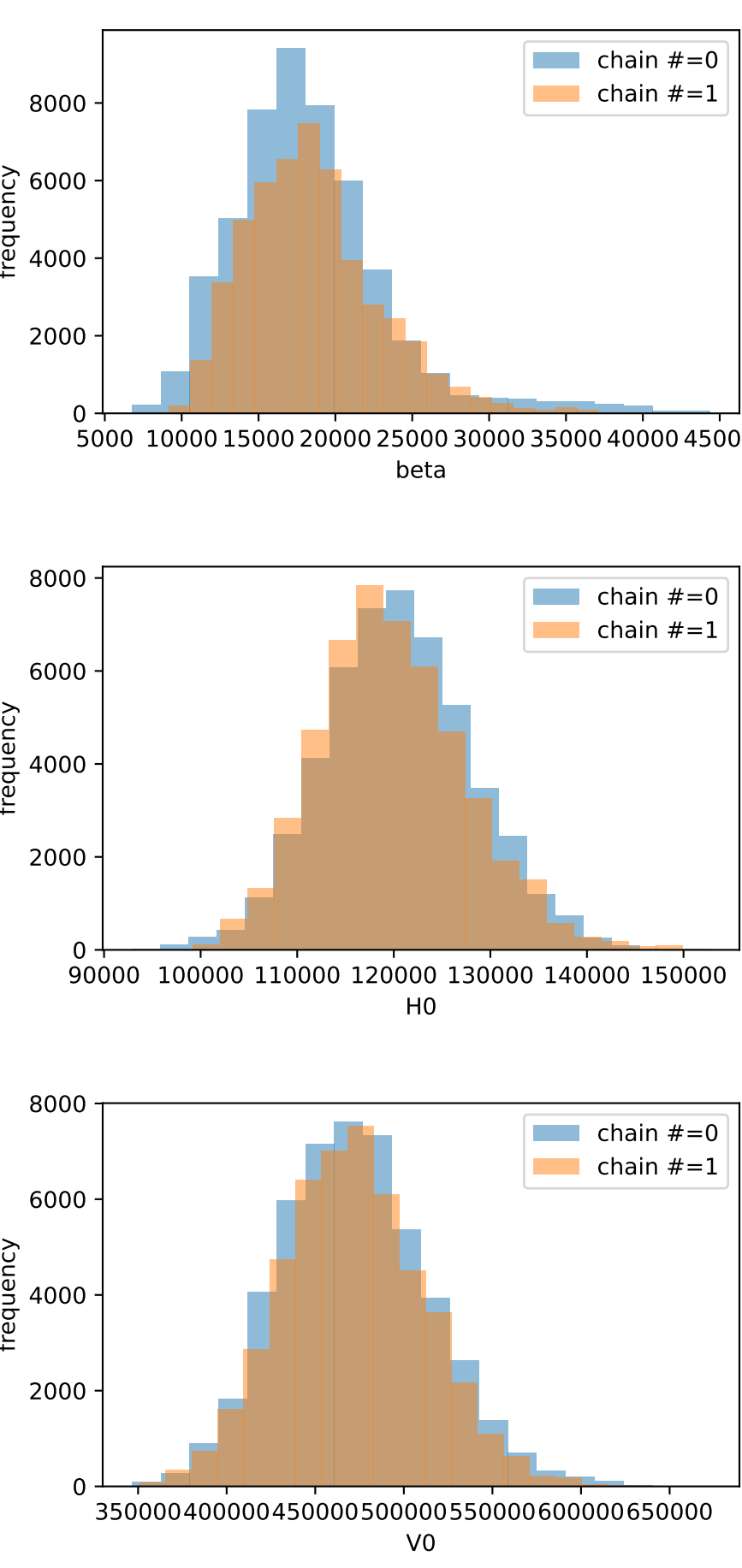

mu
0
5
10
15
20
25
zeroI
oneI
twoI
threeI
fourI
fiveI
sixI
sevenI
eightI
nineI
tenI
beta
0
10000
20000
30000
40000
zeroI
oneI
twoI
threeI
fourI
fiveI
sixI
sevenI
eightI
nineI
tenI
1e−5
phi
0
2
4
6
8
zeroI
oneI
twoI
threeI
fourI
fiveI
sixI
sevenI
eightI
nineI
tenI


Kimura66
Error sum of squares
350
300
250
200
150
100
50
0
2
4
6
8
10
Adjusted R squared
0
−2
−4
−6
−8
0
2
4
6
8
10
AIC
700
600
500
400
300
200
100
0
2
4
6
8
10
Number of infection states

zero_i


chain #=0
chain #=1
frequency
7000
6000
5000
4000
3000
2000
1000
0
0.02
0.04
0.06
0.08
mu

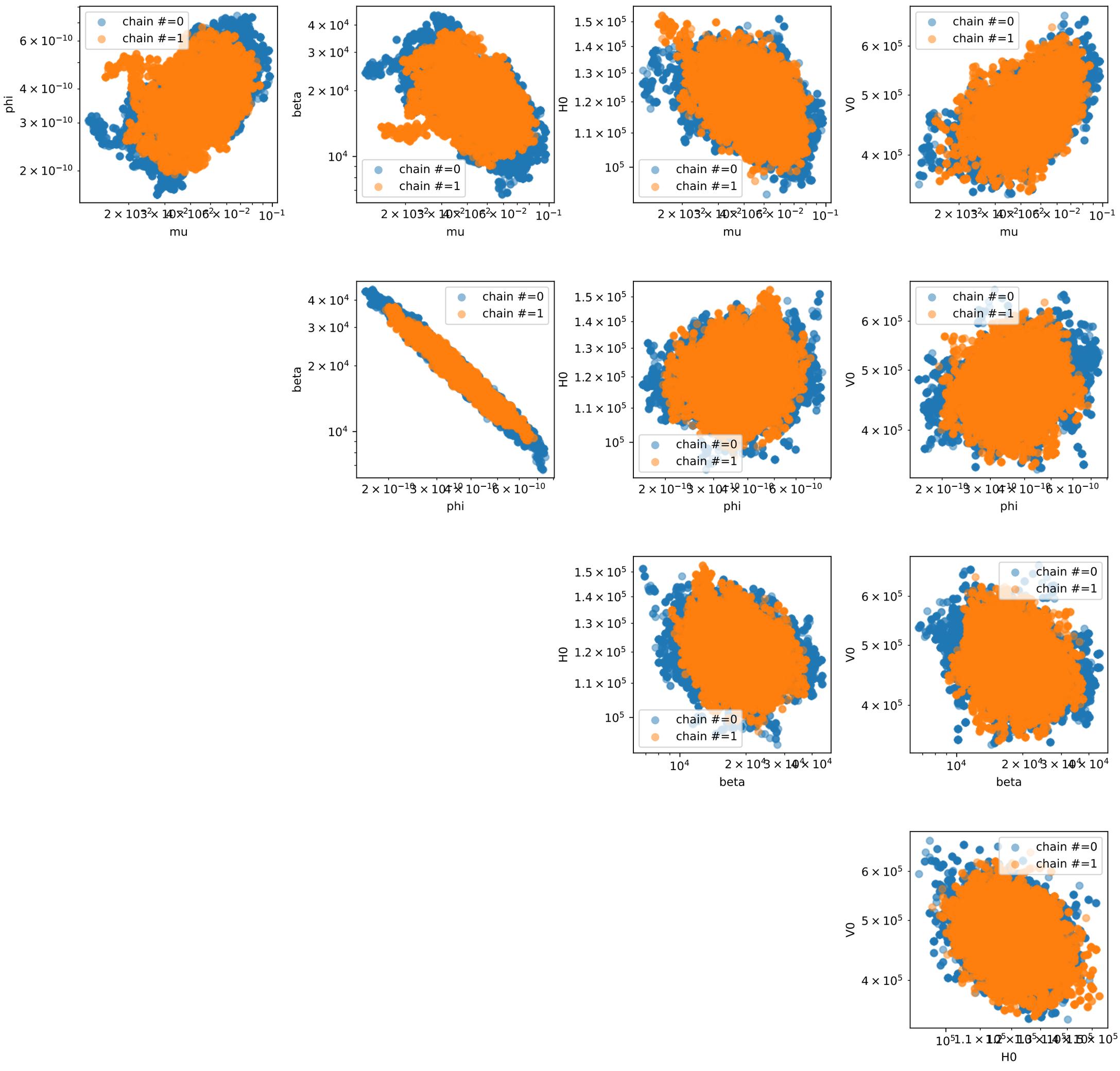

chain #=0
chain #=1
frequency
8000
6000
4000
2000
0
2
3
4
5
6
7
phi
1e−10

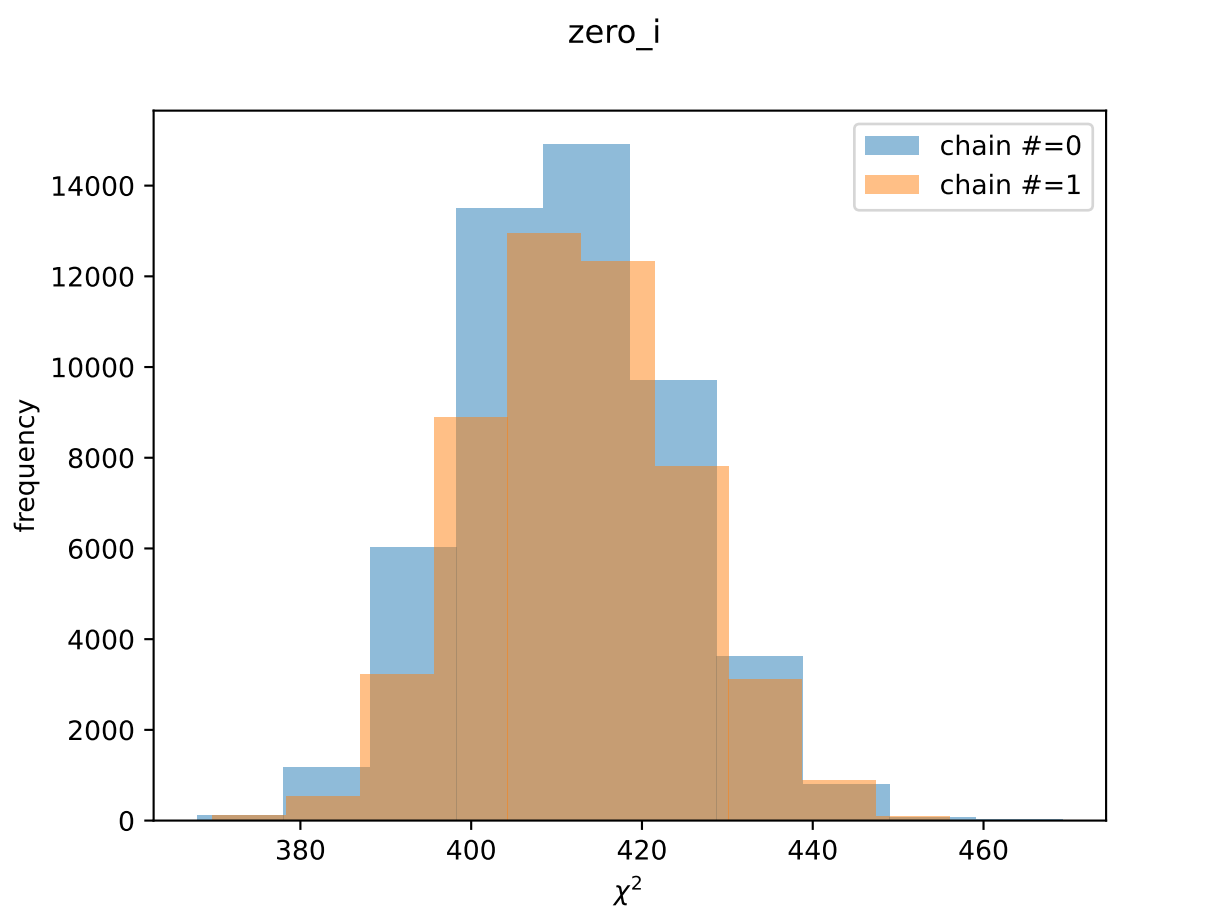

chain #=0
chain #=1
frequency
8000
6000
4000
2000
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
beta

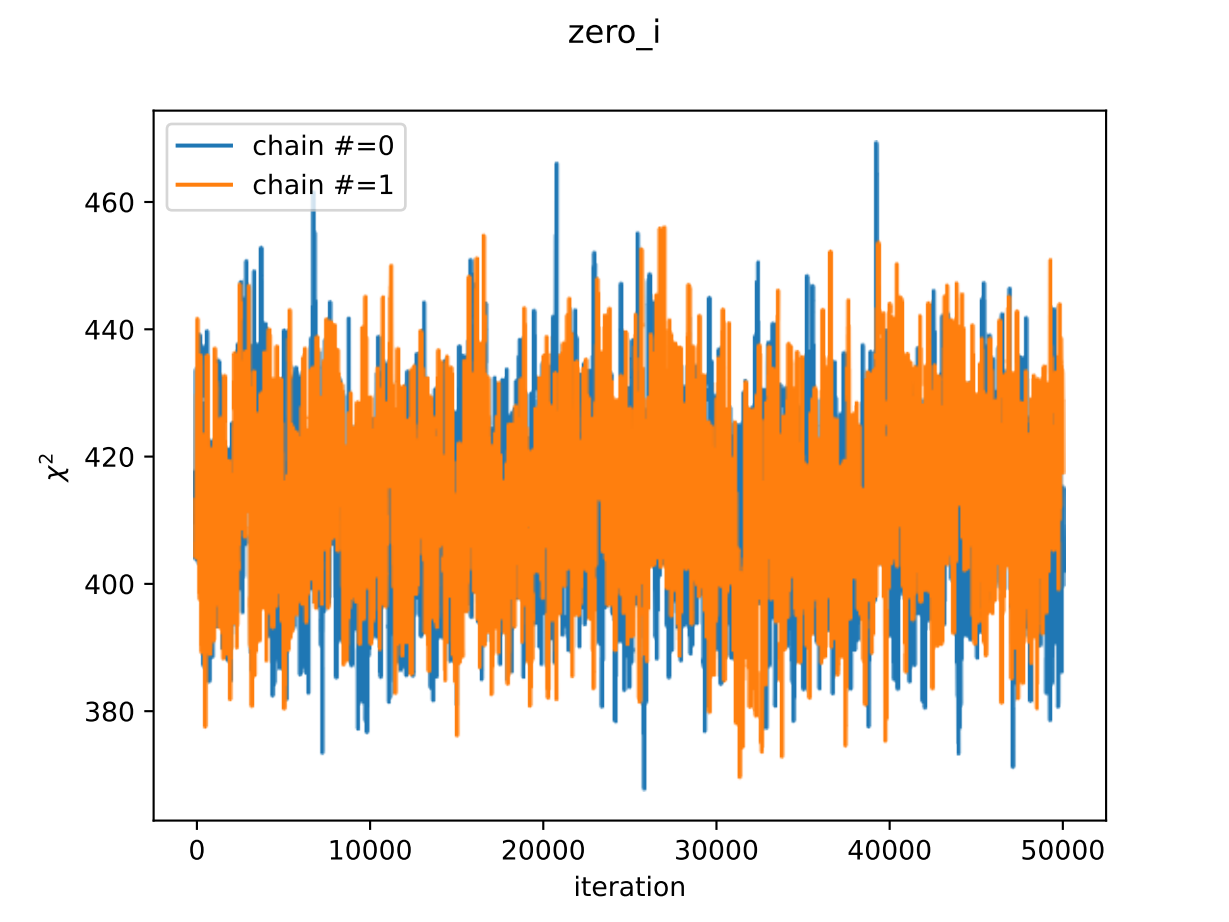
chain #=0
chain #=1
frequency
8000
6000
4000
2000
0
90000
100000
110000
120000
130000
140000
150000
H0

chain #=0
chain #=1
frequency
8000
6000
4000
2000
0
350000
400000
450000
500000
550000
600000
650000
V0

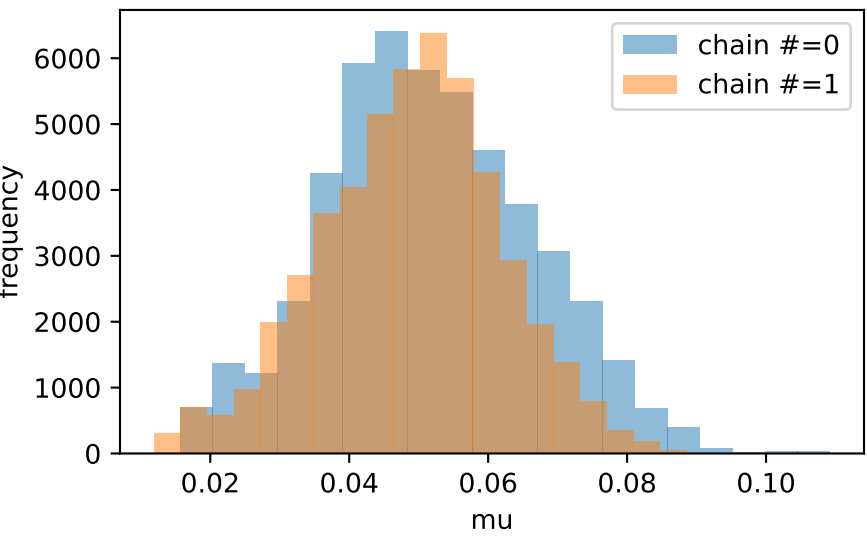
zero_i

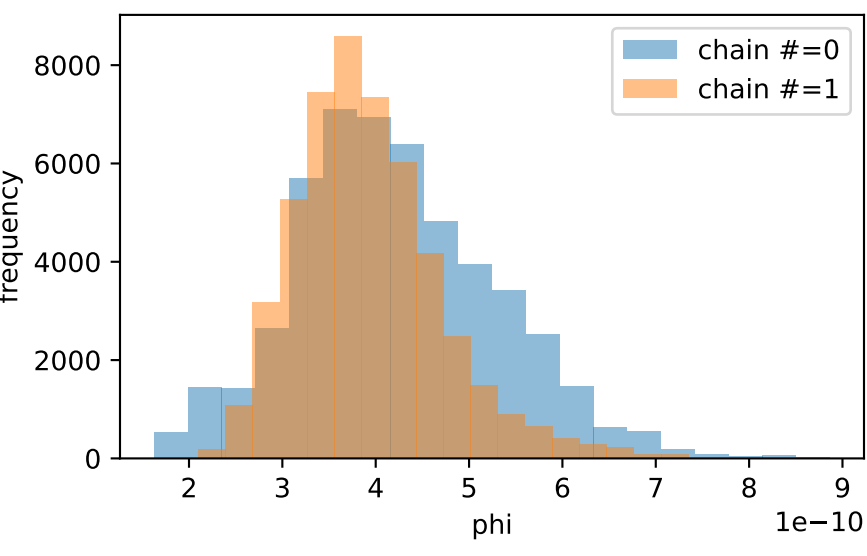


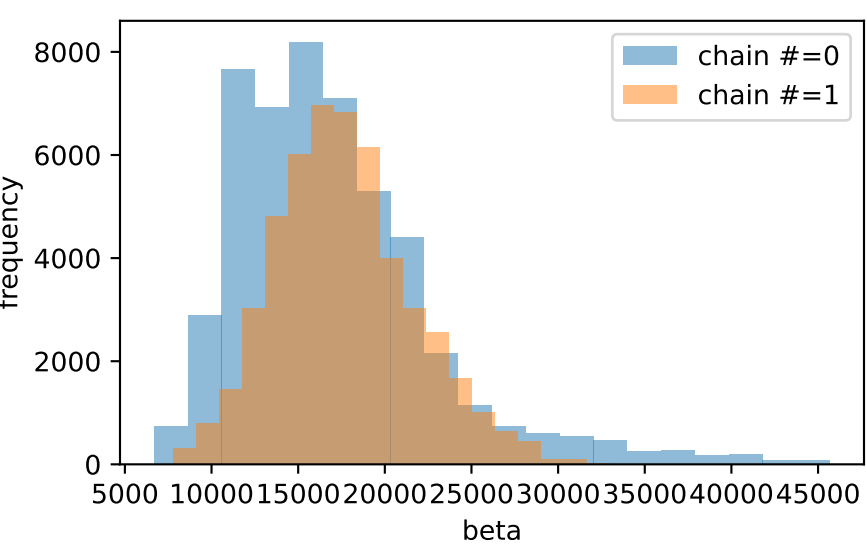

zero_i
chain #=0
chain #=1
frequency
14000
12000
10000
8000
6000
4000
2000
0
380
400
420
440
460
χ^2

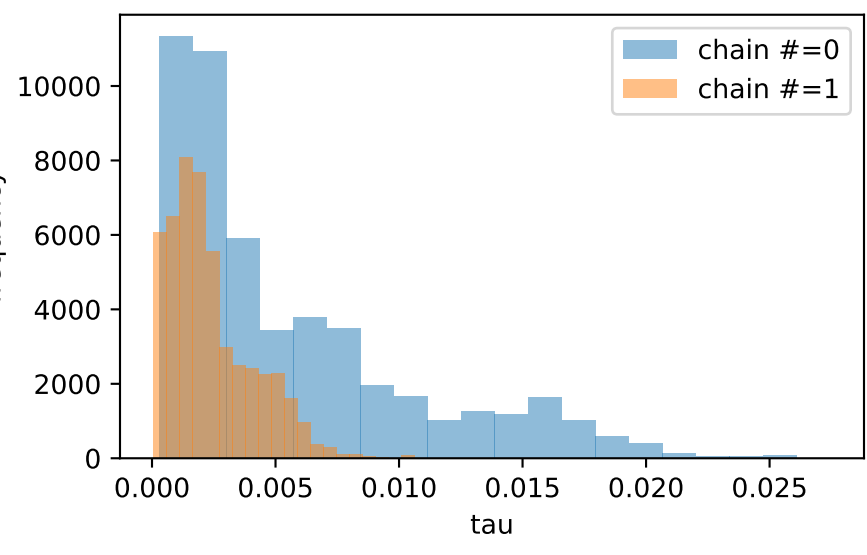

zero_i
chain #=0
chain #=1
460
440
420
400
380
χ^2
0
10000
20000
30000
40000
50000
iteration

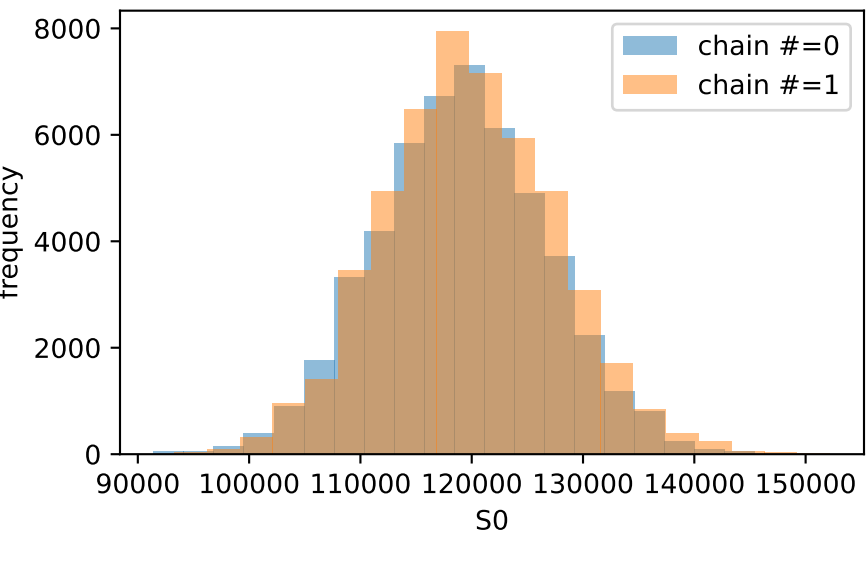
one_i

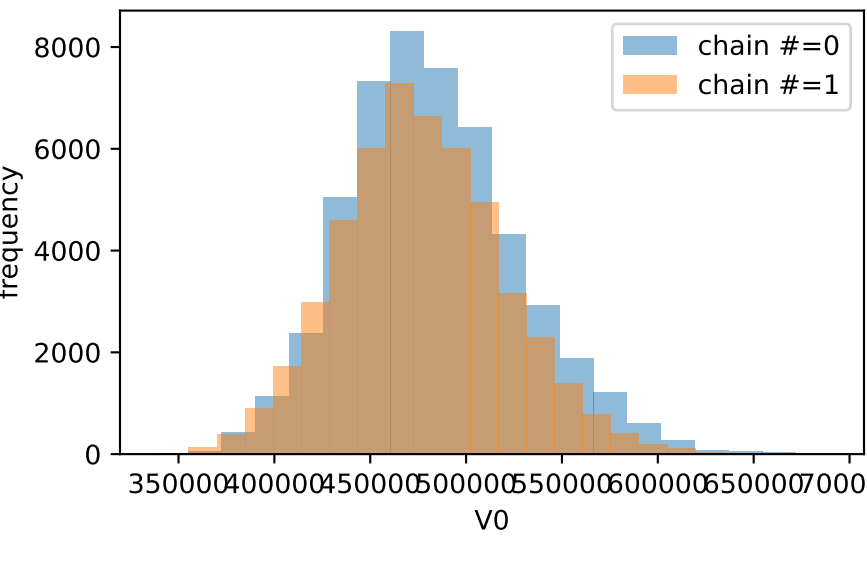

chain #=0
chain #=1
frequency
mu


chain #=0
chain #=1
frequency
phi
1e−10

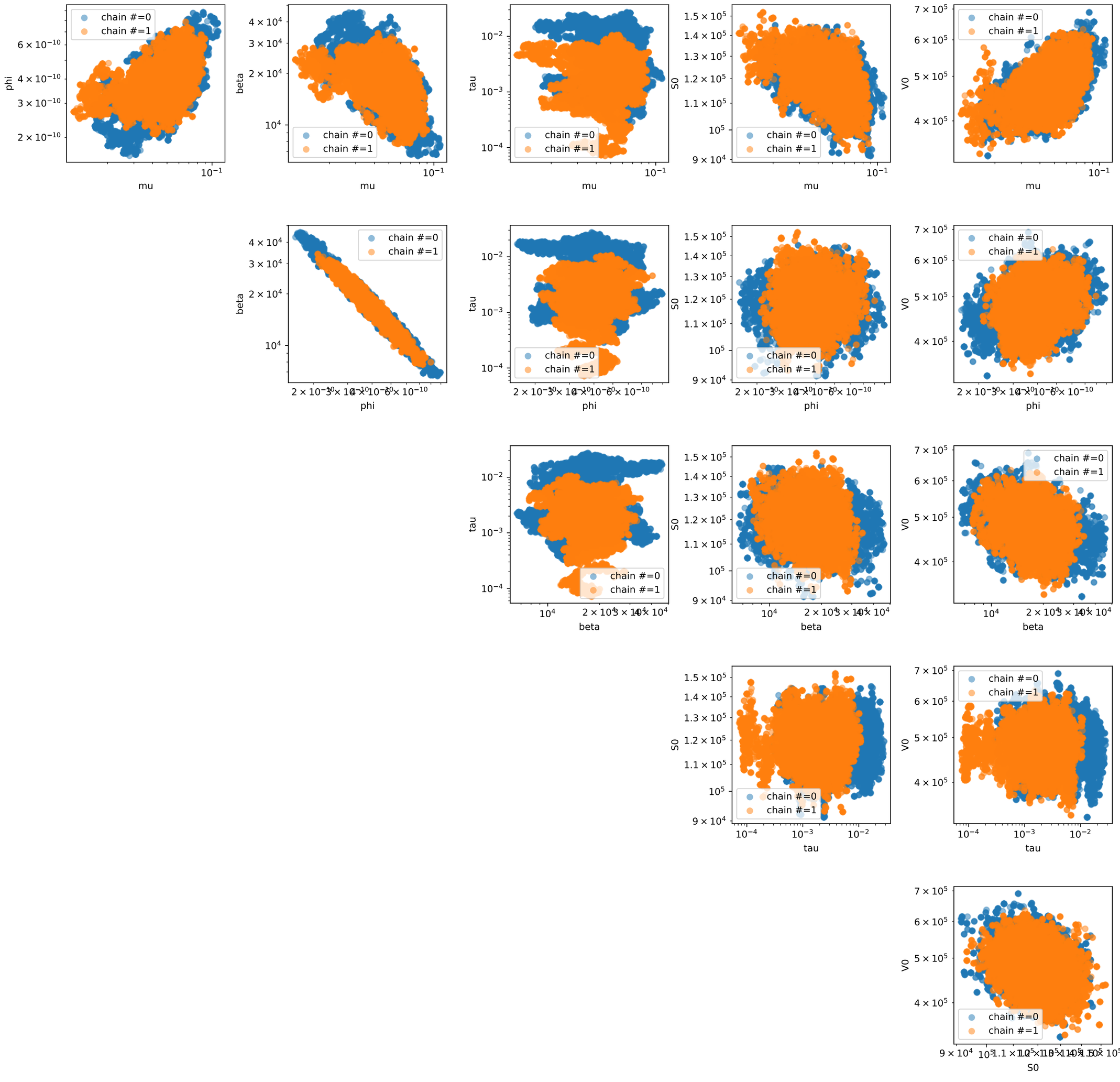

chain #=0
chain #=1
frequency
beta

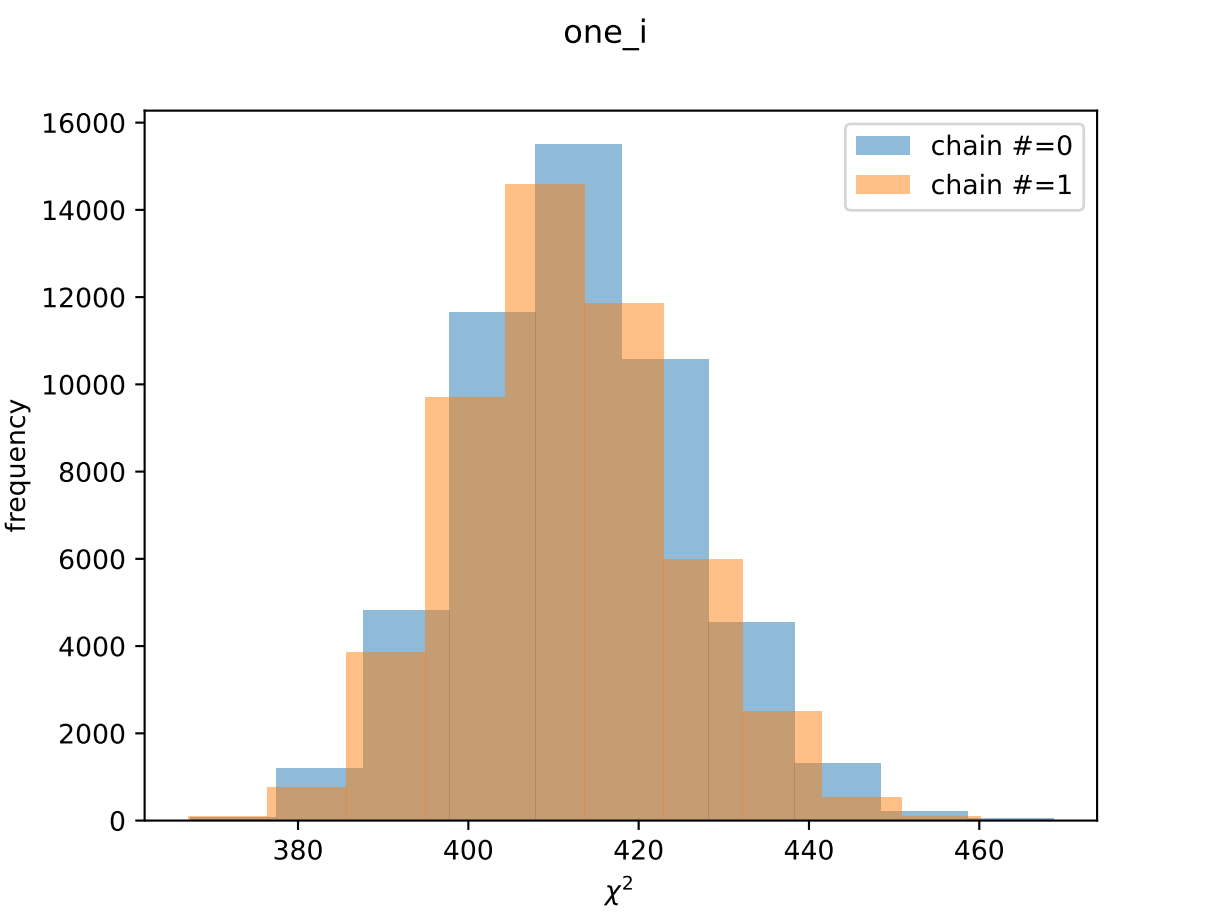

chain #=0
chain #=1
tau

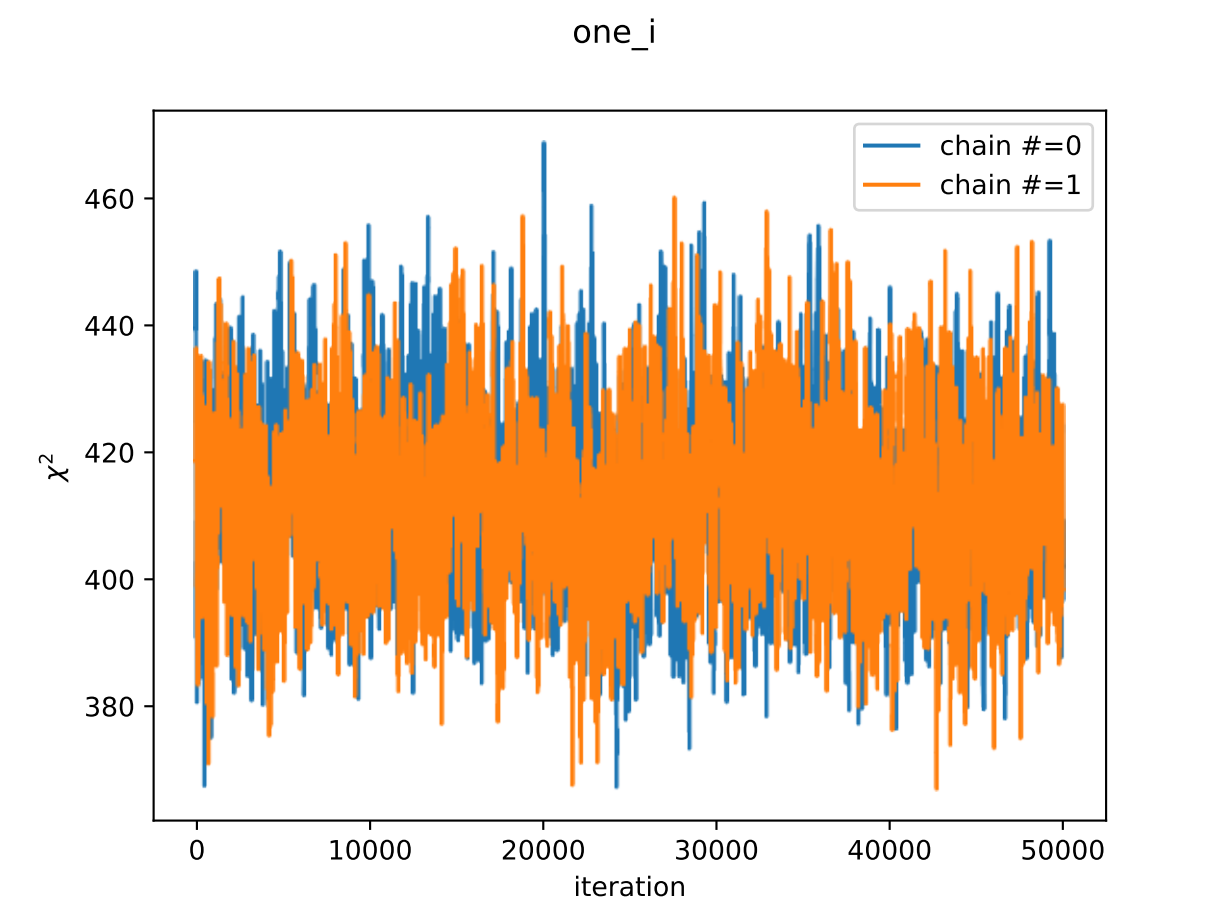

chain #=0
chain #=1
frequency
S0


chain #=0
chain #=1
frequency
V0

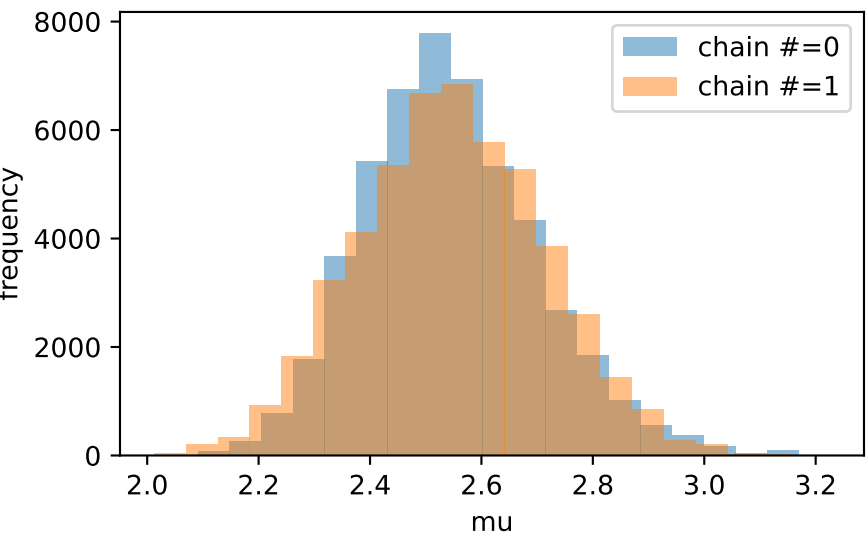
one_i

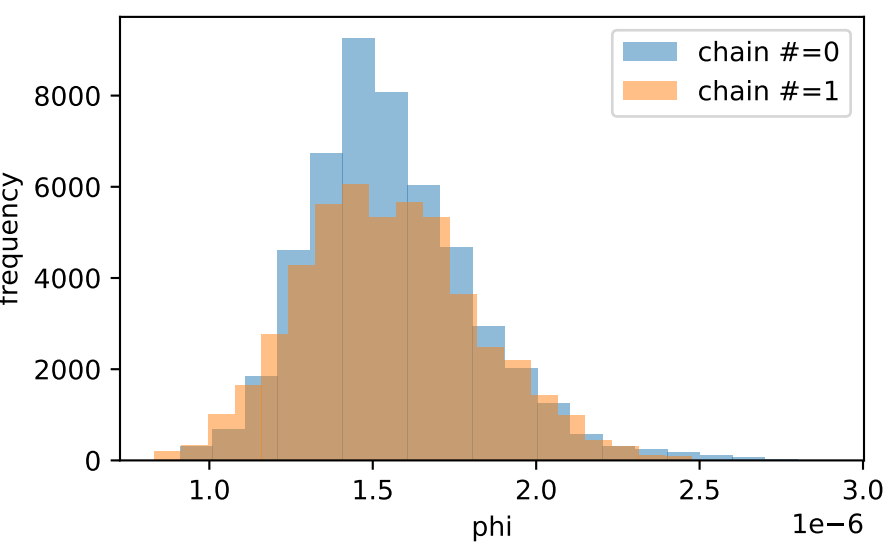


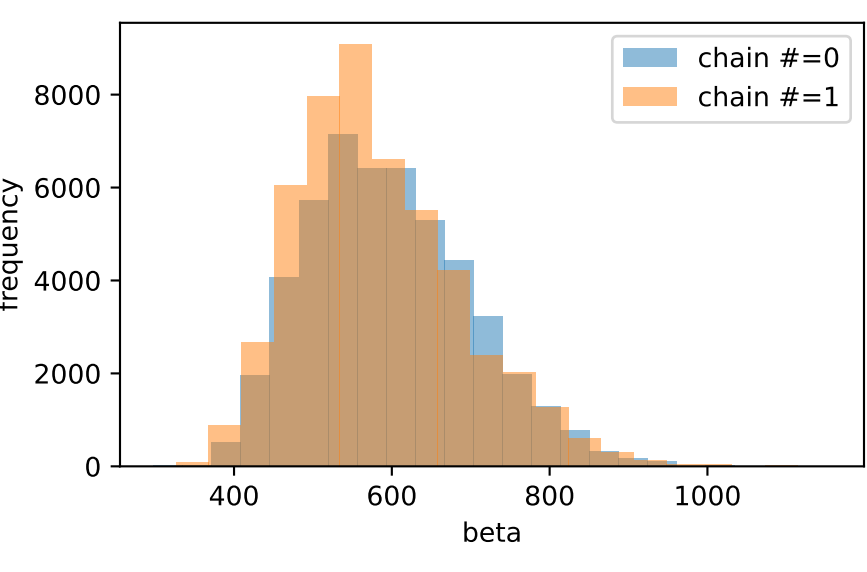

one_i
chain #=0
chain #=1
frequency
16000
14000
12000
10000
8000
6000
4000
2000
0
380
400
420
440
460
χ^2

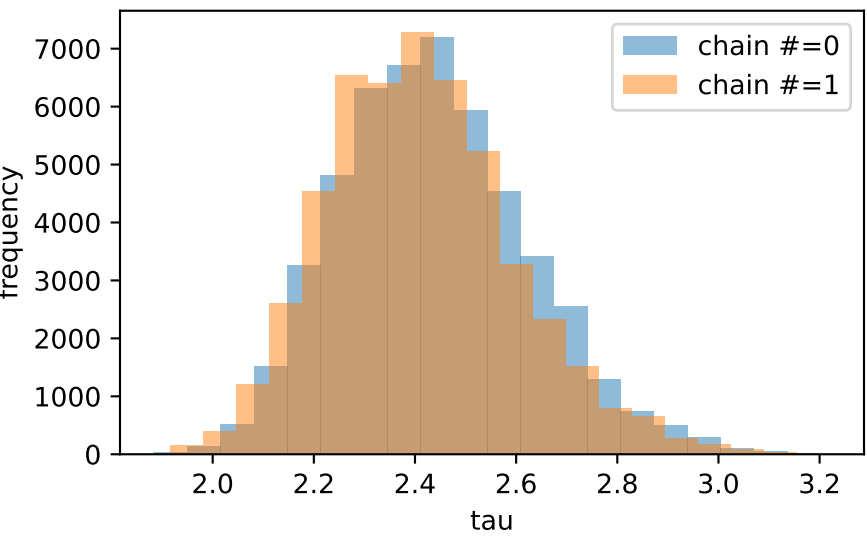

one_i
chain #=0
chain #=1
460
440
420
400
380
χ^2
0
10000
20000
30000
40000
50000
iteration

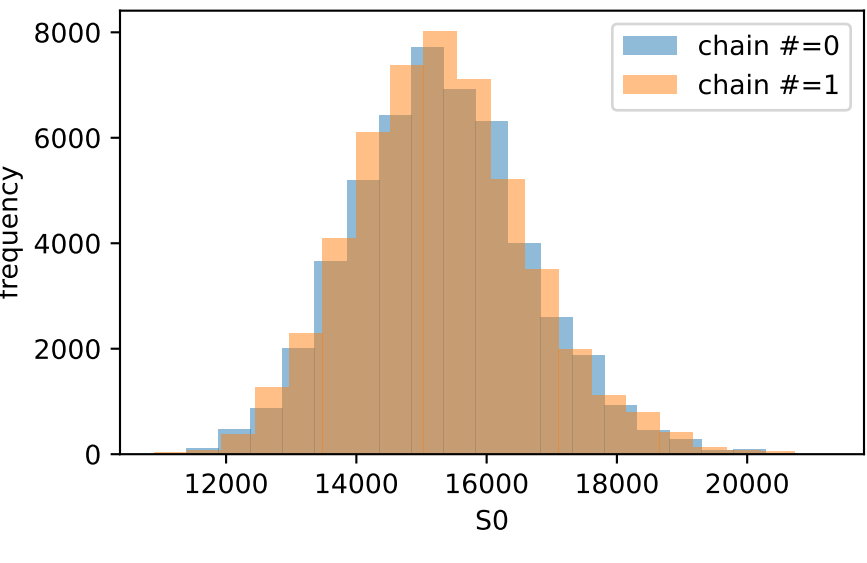
two_i

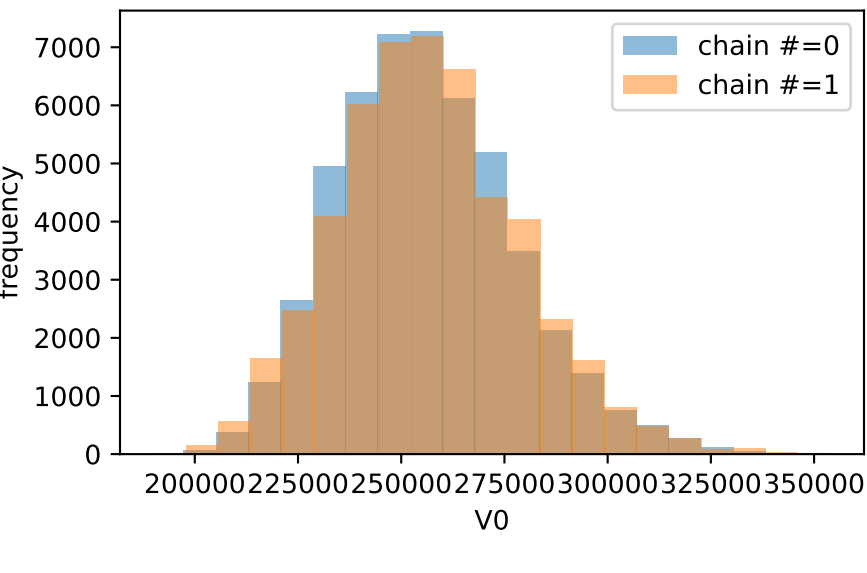

chain #=0
chain #=1
frequency
mu


chain #=0
chain #=1
frequency
phi
1e−6

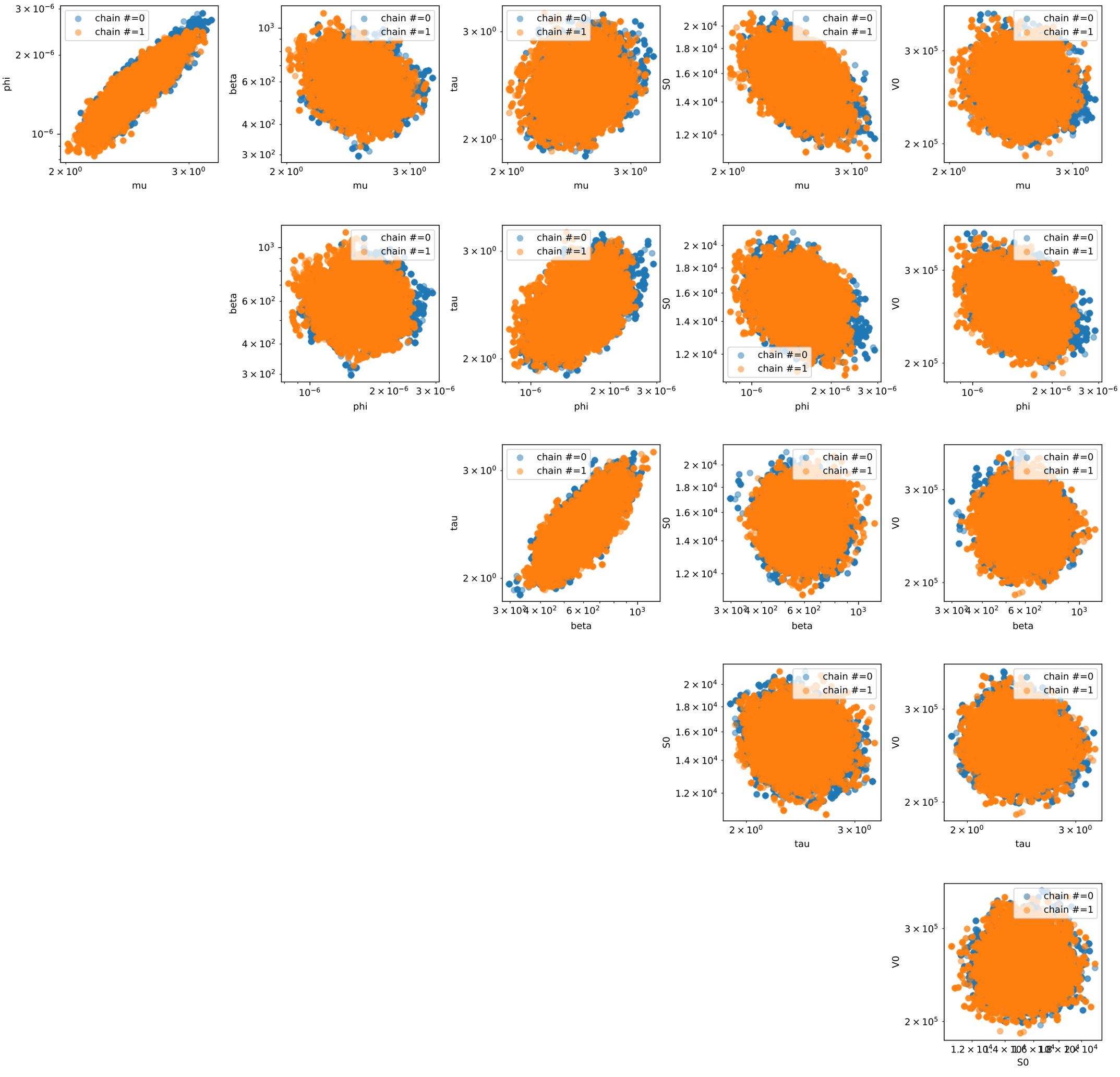

chain #=0
chain #=1
frequency
beta

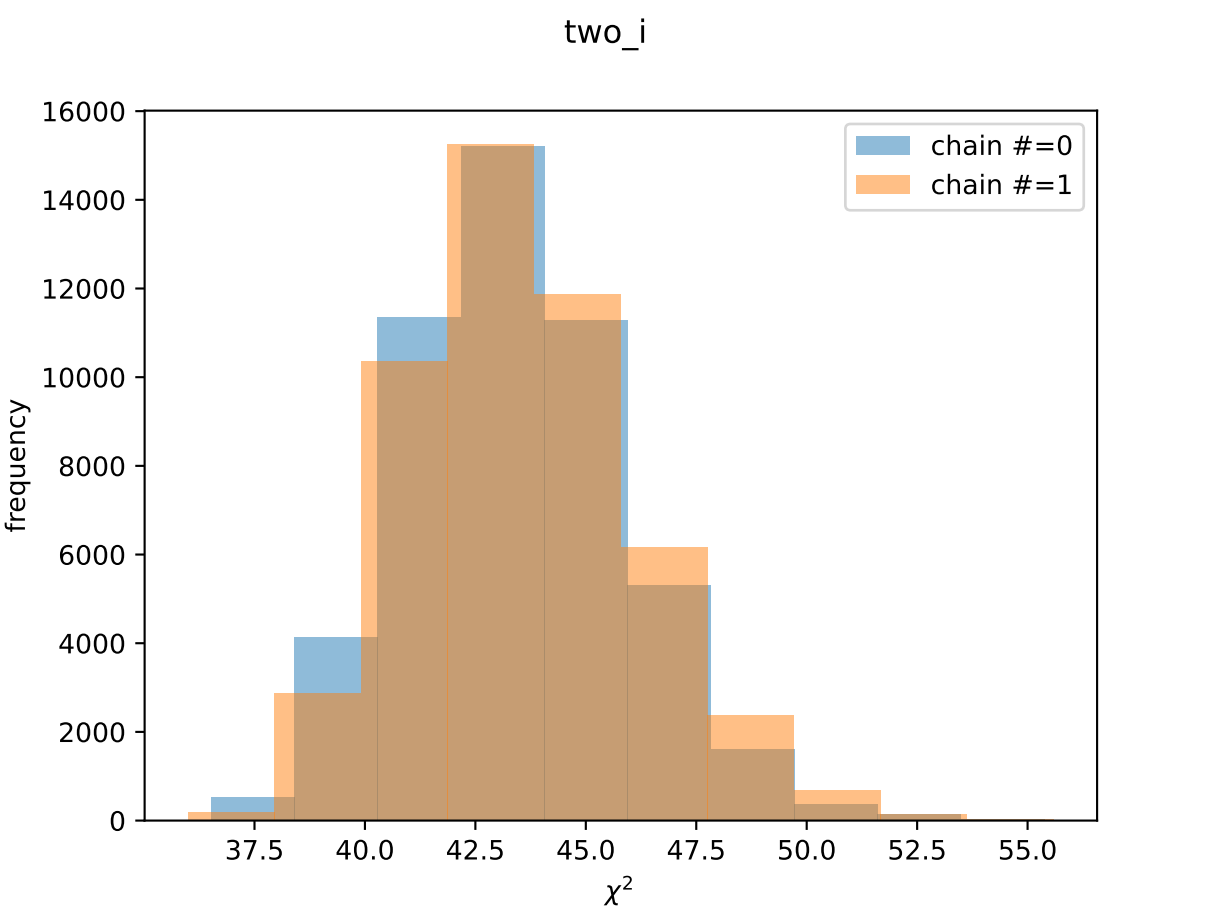

chain #=0
chain #=1
frequency
tau

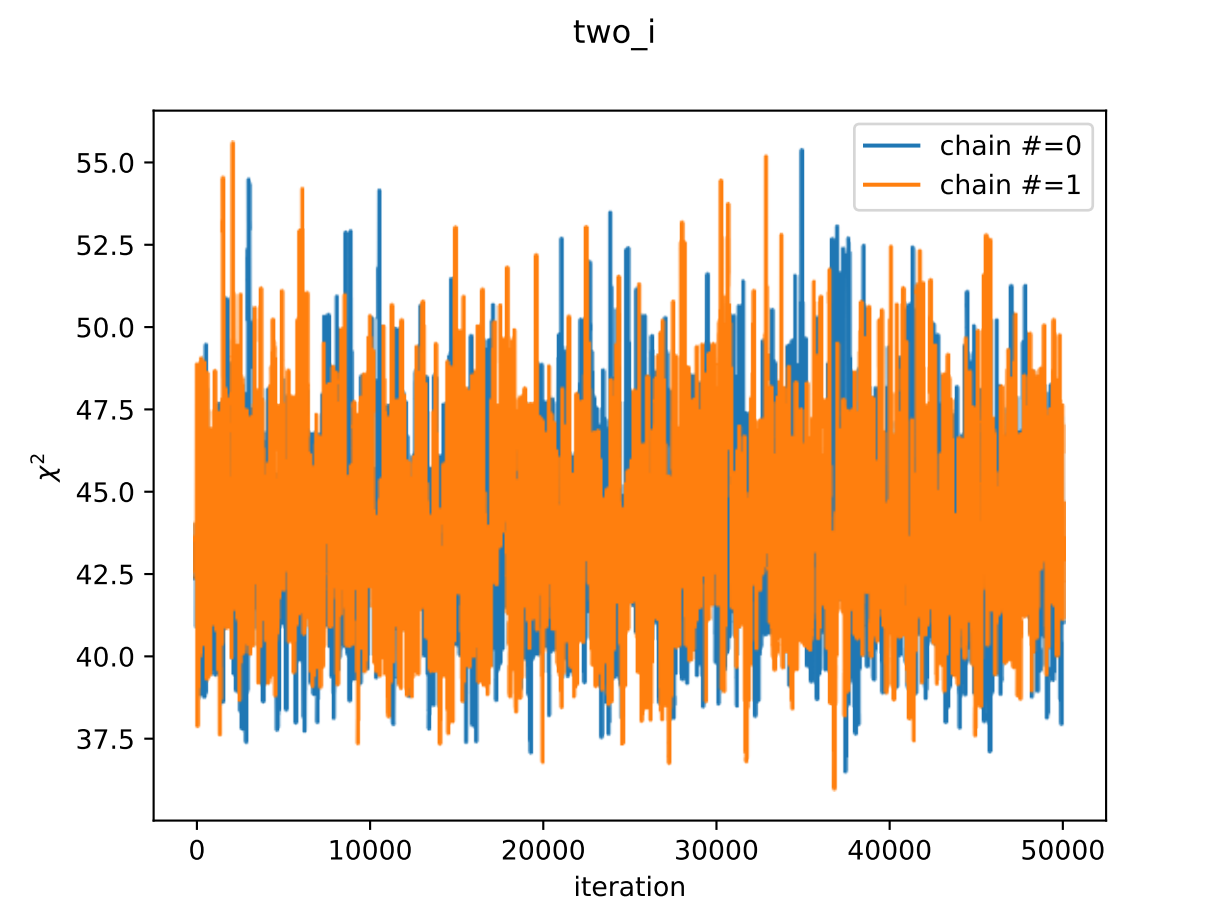

chain #=0
chain #=1
frequency
S0


chain #=0
chain #=1
frequency
V0

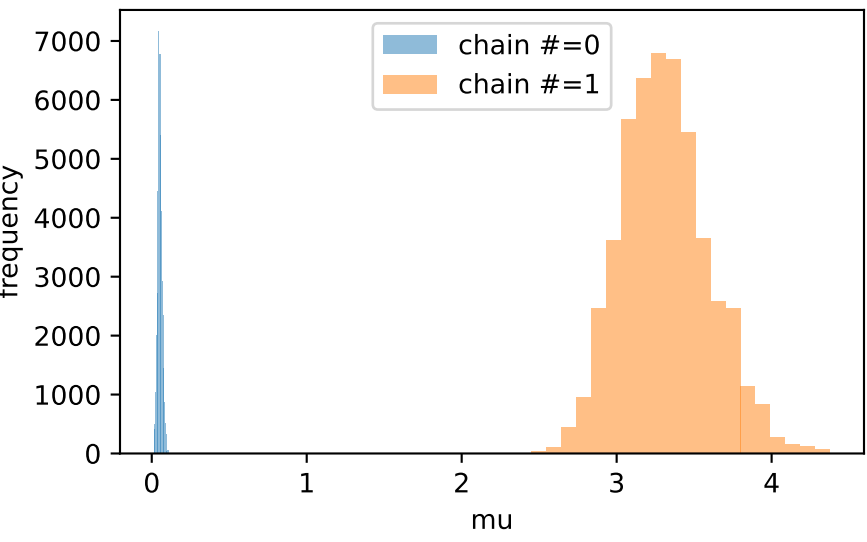
two_i

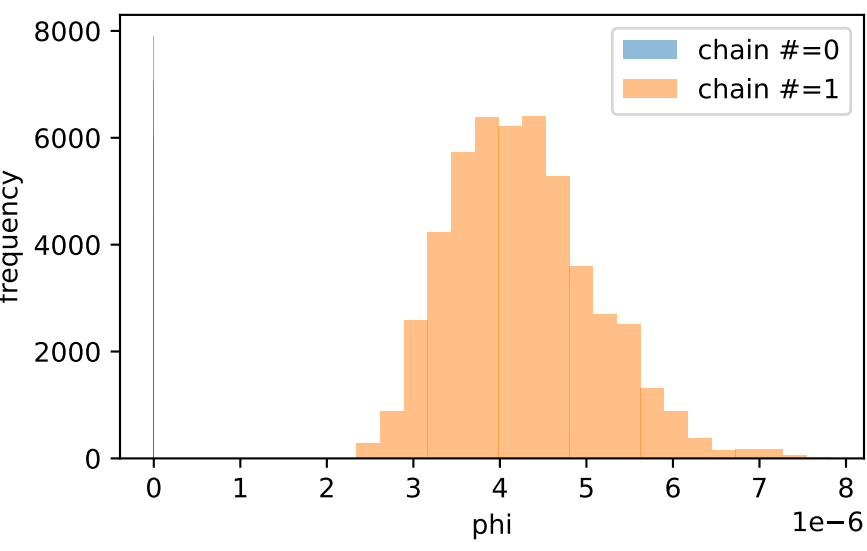


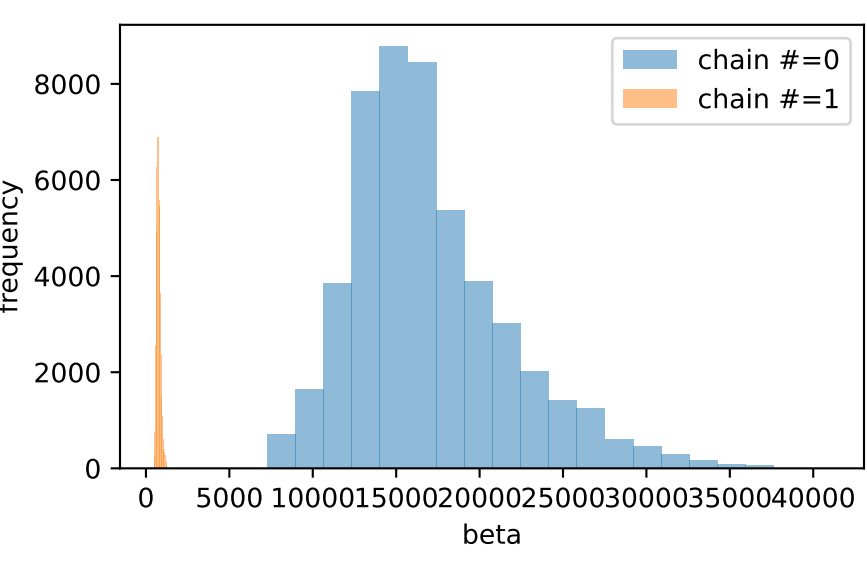

two_i
chain #=0
chain #=1
frequency
16000
14000
12000
10000
8000
6000
4000
2000
0
37.5
40.0
42.5
45.0
47.5
50.0
52.5
55.0
χ^2

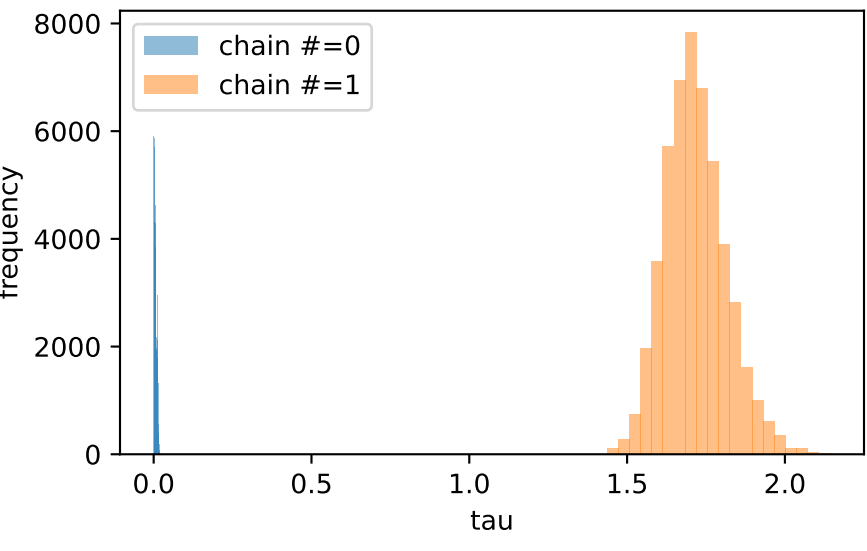

two_i
chain #=0
chain #=1
55.0
52.5
50.0
47.5
45.0
42.5
40.0
37.5
χ^2
0
10000
20000
30000
40000
50000
iteration

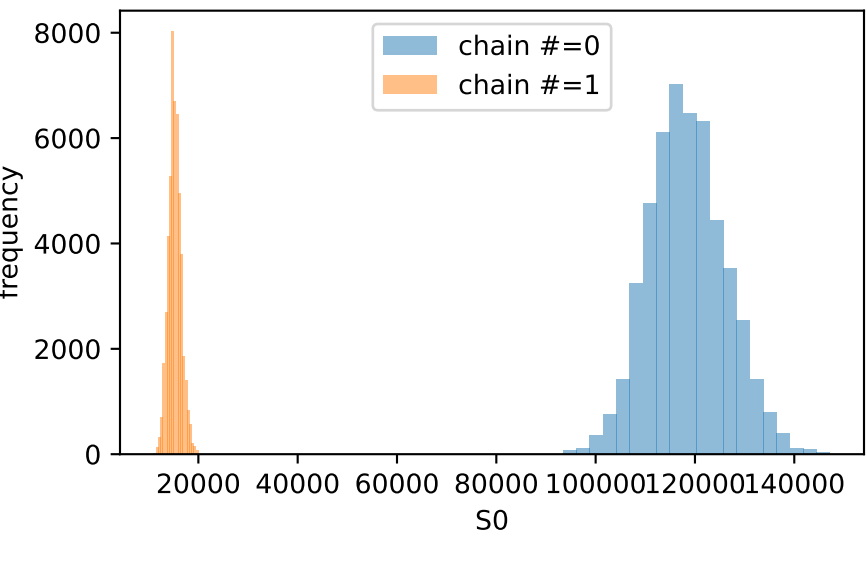
three_i

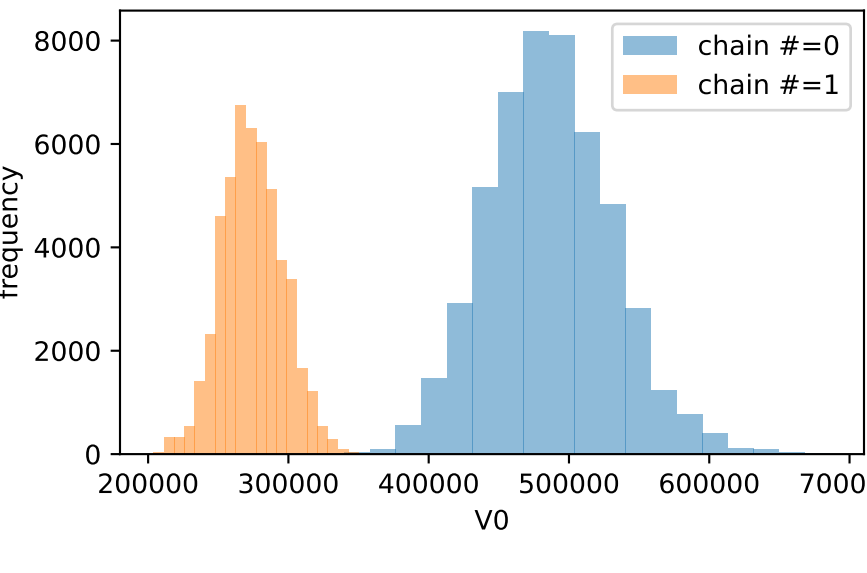

chain #=0
chain #=1
frequency
mu


chain #=0
chain #=1
frequency
phi
1e−6


chain #=0
chain #=1
frequency
beta

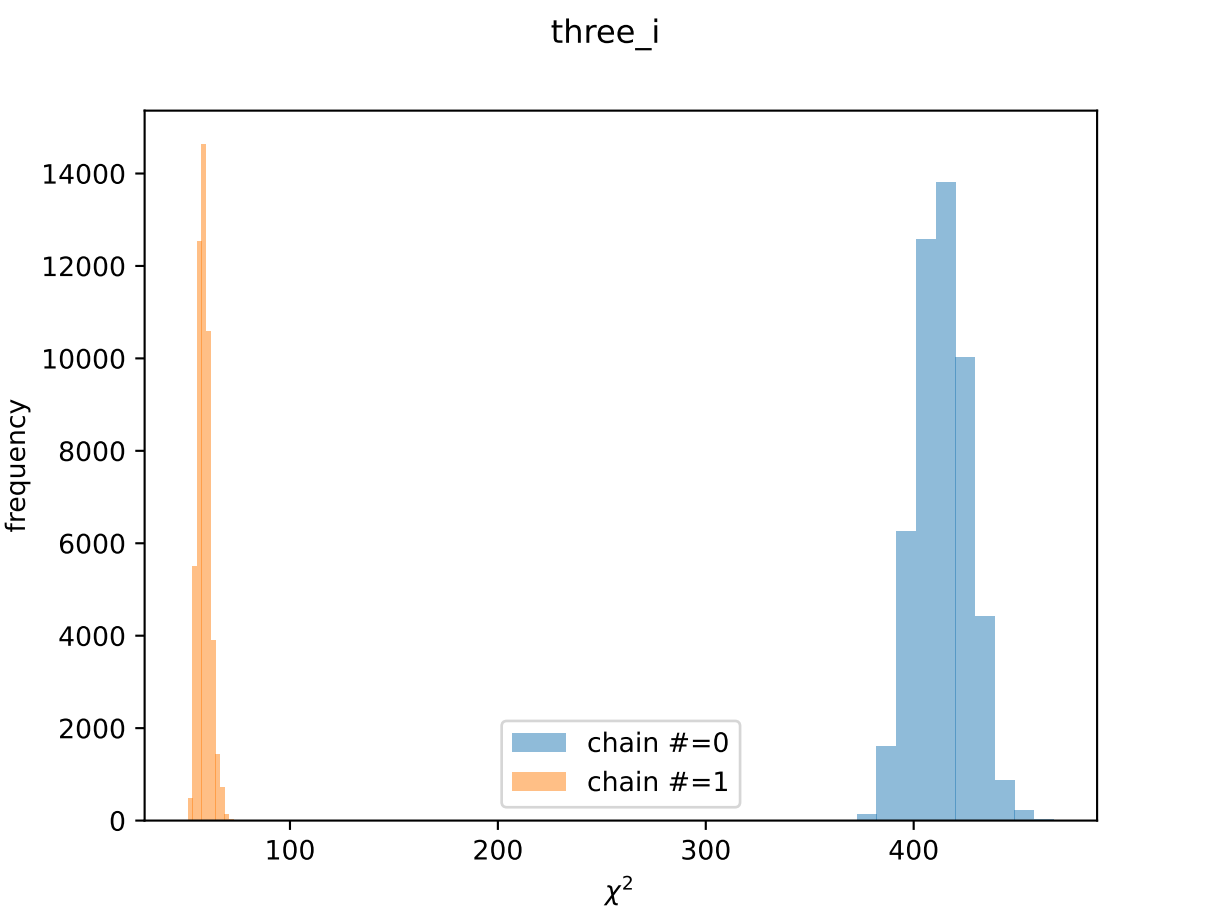

chain #=0
chain #=1
frequency
tau

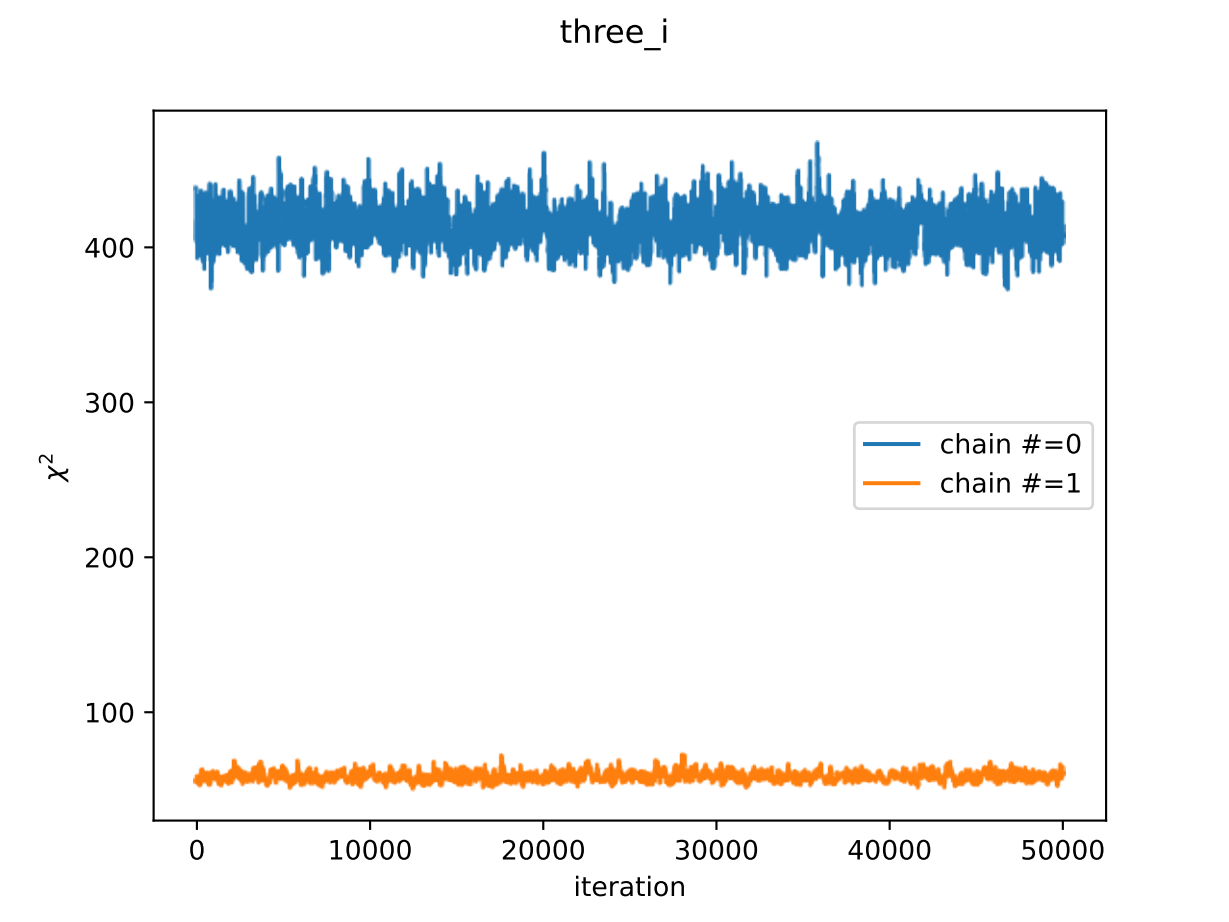

chain #=0
chain #=1
frequency
S0


chain #=0
chain #=1
frequency
V0

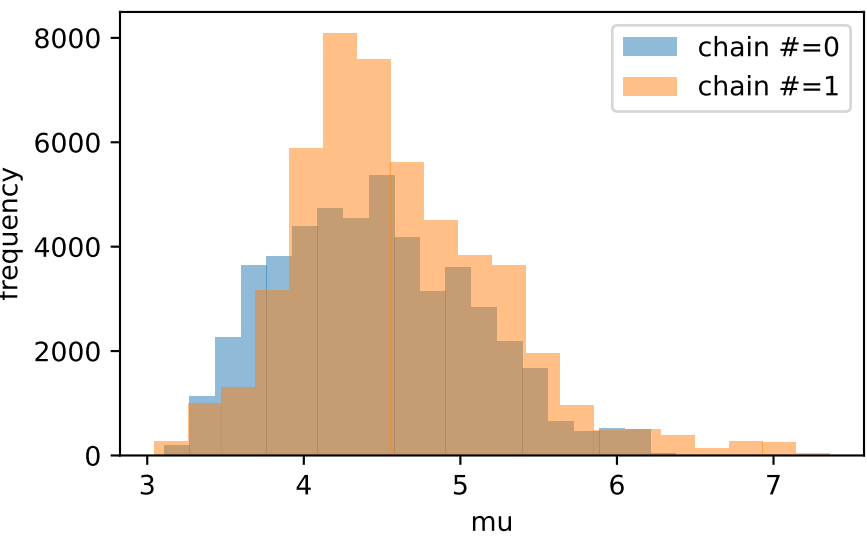
three_i

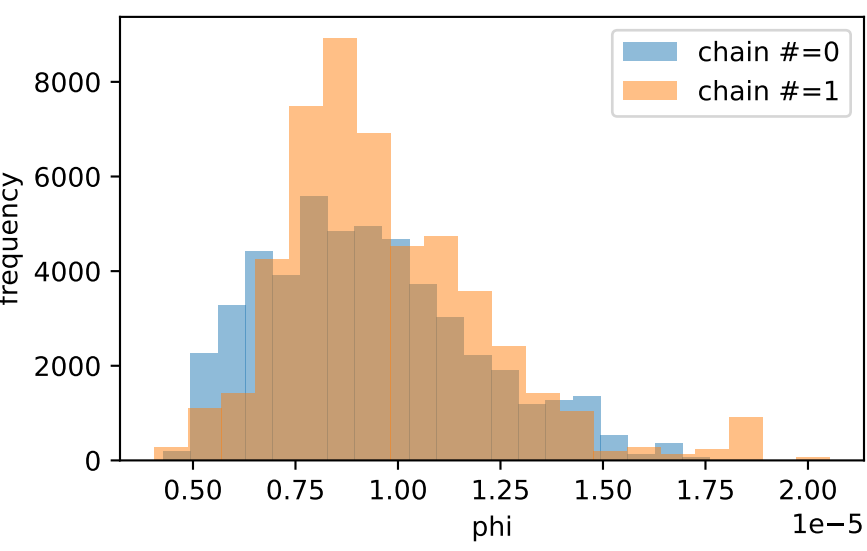
chain #=0
chain #=1
phi
beta
tau
S0
V0
mu
phi
tau
S0
V0
beta
tau
S0
V0
S0

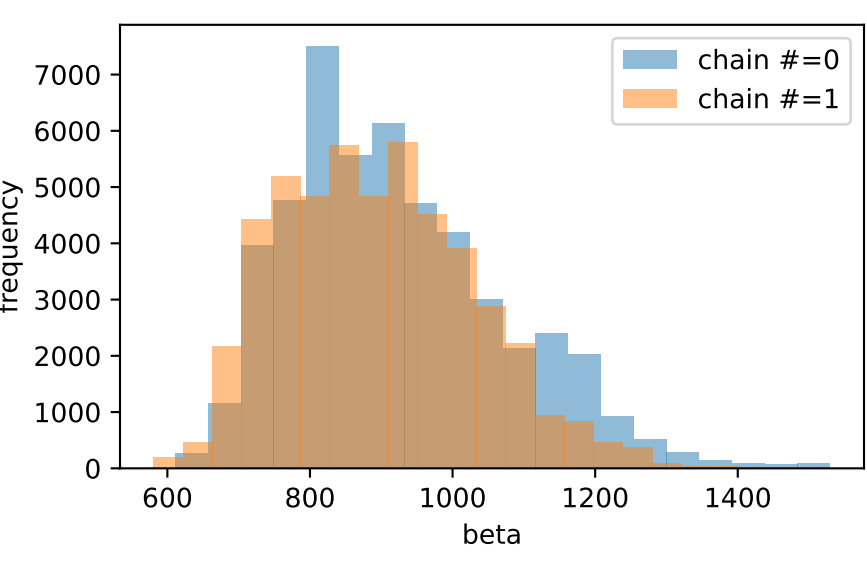

three_i
frequency
14000
12000
10000
8000
6000
4000
2000
0
100
200
300
400
χ^2
chain #=0
chain #=1

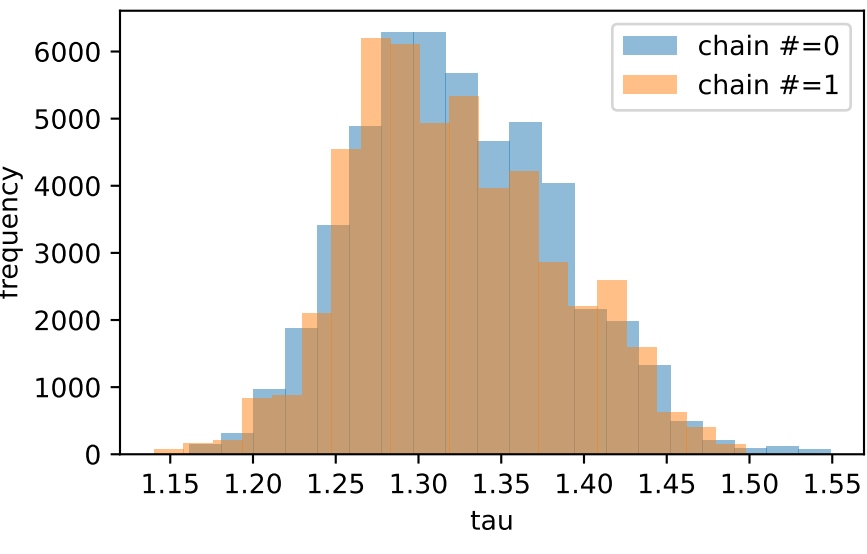

three_i
400
300
200
100
χ^2
chain #=0
chain #=1
0
10000
20000
30000
40000
50000
iteration

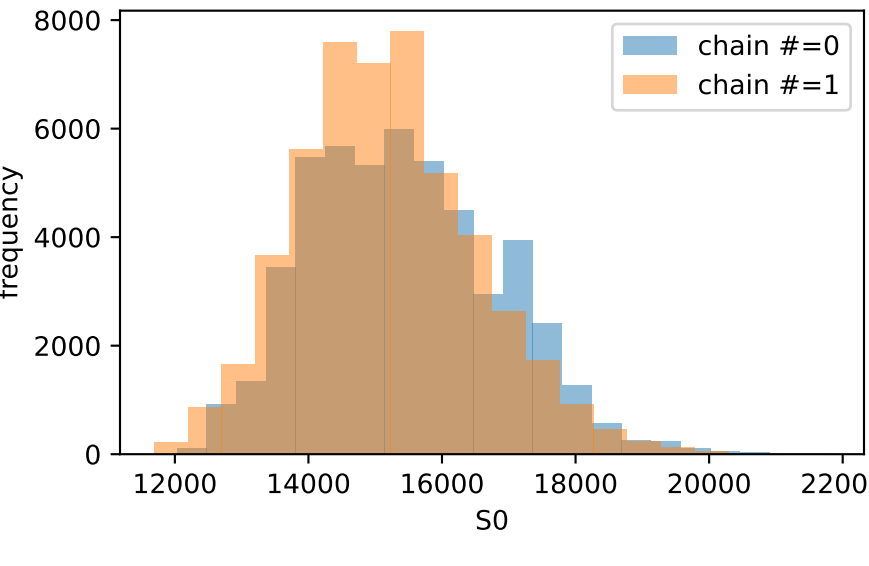
four_i

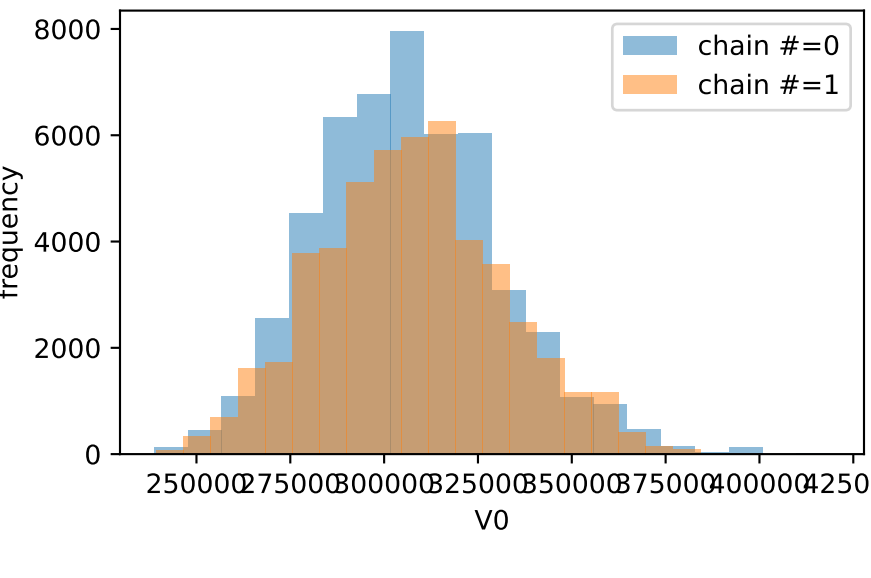

chain #=0
chain #=1
frequency
8000
6000
4000
2000
0
3
4
5
6
7
mu


chain #=0
chain #=1
frequency
8000
6000
4000
2000
0
0.50
0.75
1.00
1.25
1.50
1.75
2.00
phi
1e−5

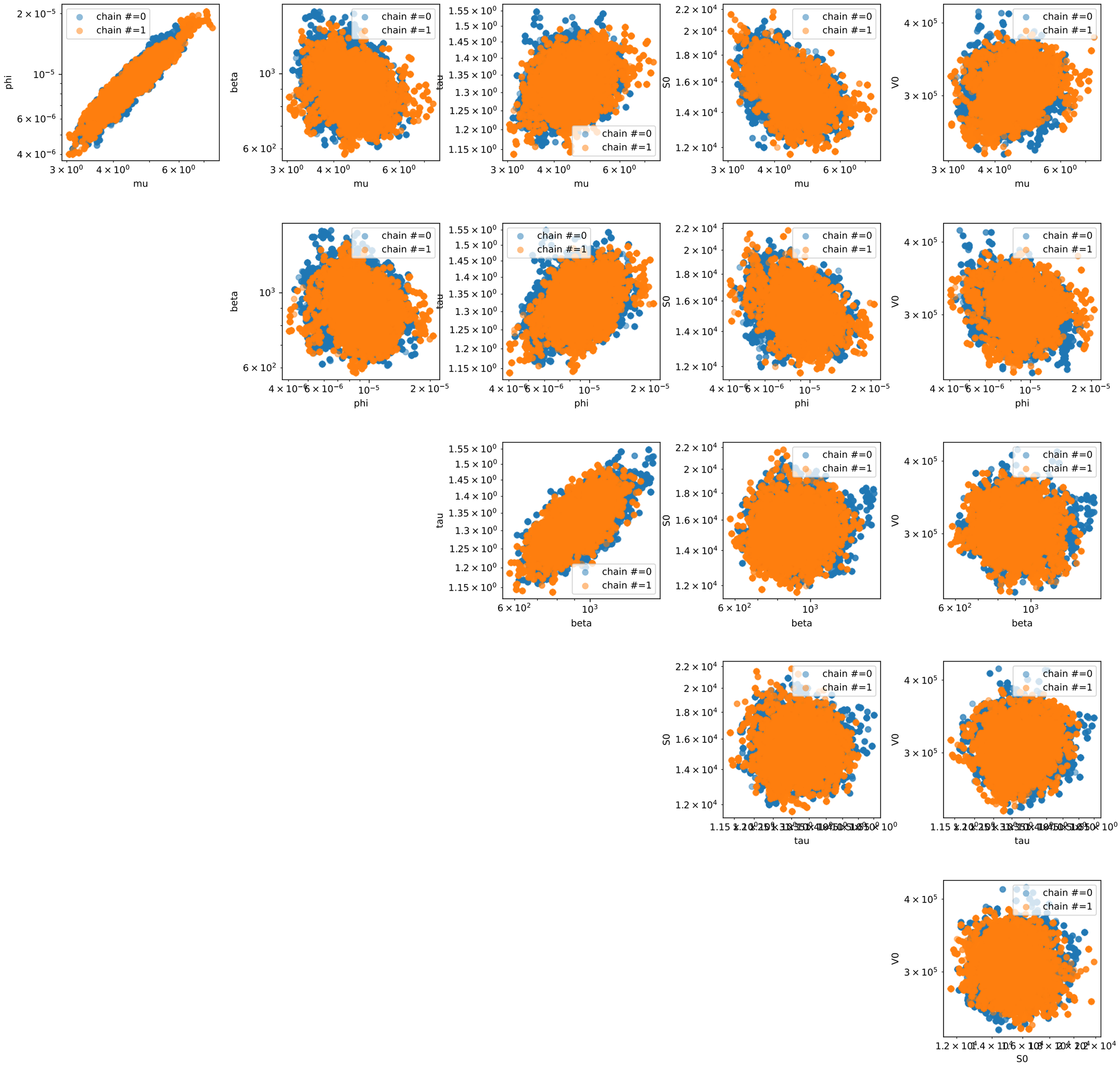

chain #=0
chain #=1
frequency
7000
6000
5000
4000
3000
2000
1000
0
600
800
1000
1200
1400
beta

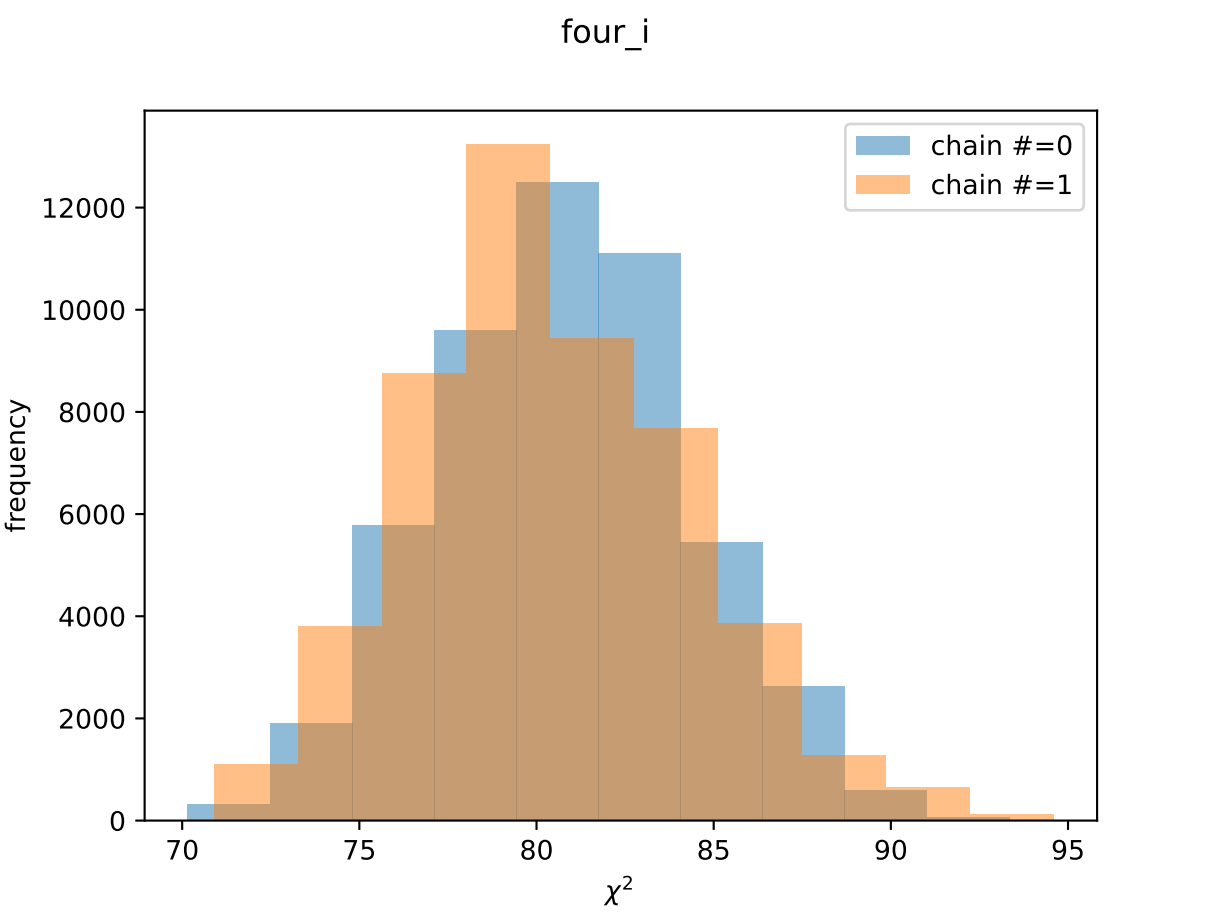

chain #=0
chain #=1
frequency
6000
5000
4000
3000
2000
1000
0
1.15
1.20
1.25
1.30
1.35
1.40
1.45
1.50
1.55
tau

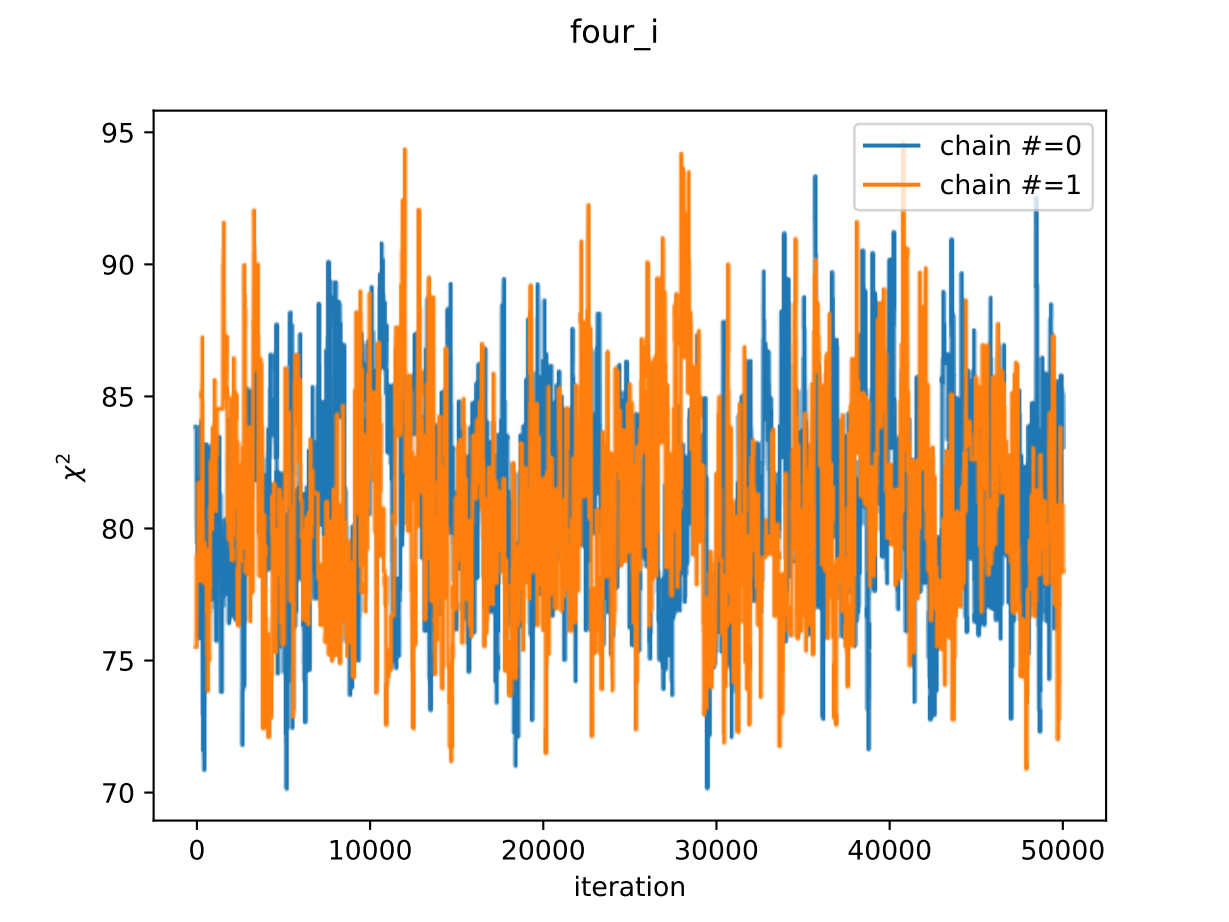

chain #=0
chain #=1
frequency
8000
6000
4000
2000
0
12000
14000
16000
18000
20000
22000
S0


chain #=0
chain #=1
frequency
8000
6000
4000
2000
0
250000
275000
300000
325000
350000
375000
400000
425000
V0

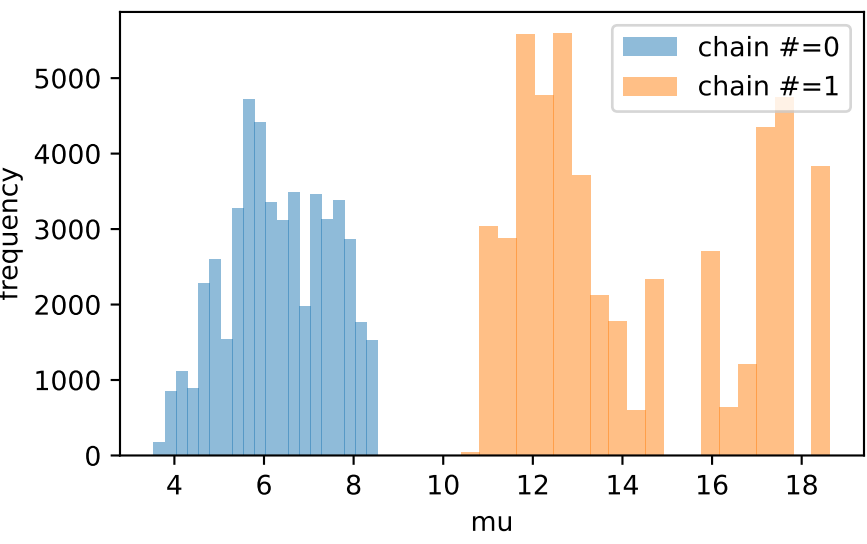
four_i




four_i
chain #=0
chain #=1
12000
10000
8000
6000
4000
2000
0
frequency
70
75
80
85
90
95
χ^2


four_i
chain #=0
chain #=1
95
90
85
80
75
70
χ^2
0
10000
20000
30000
40000
50000
iteration

five_i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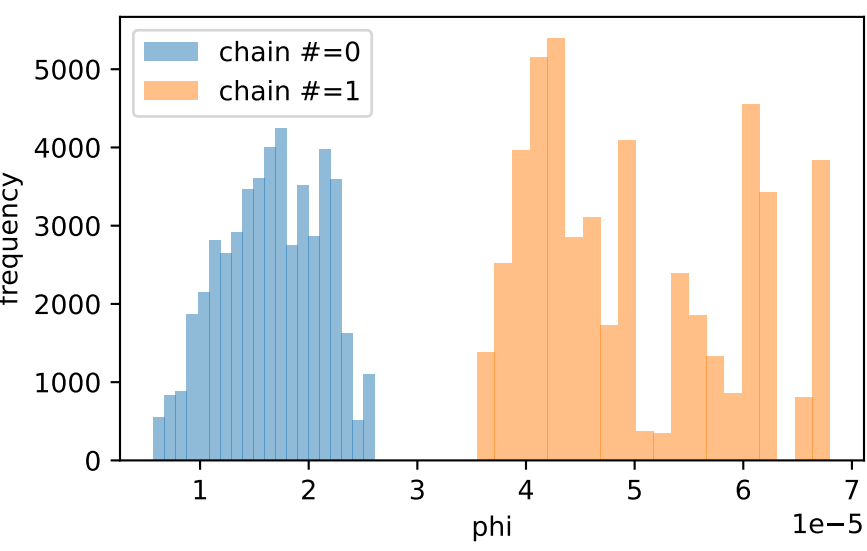
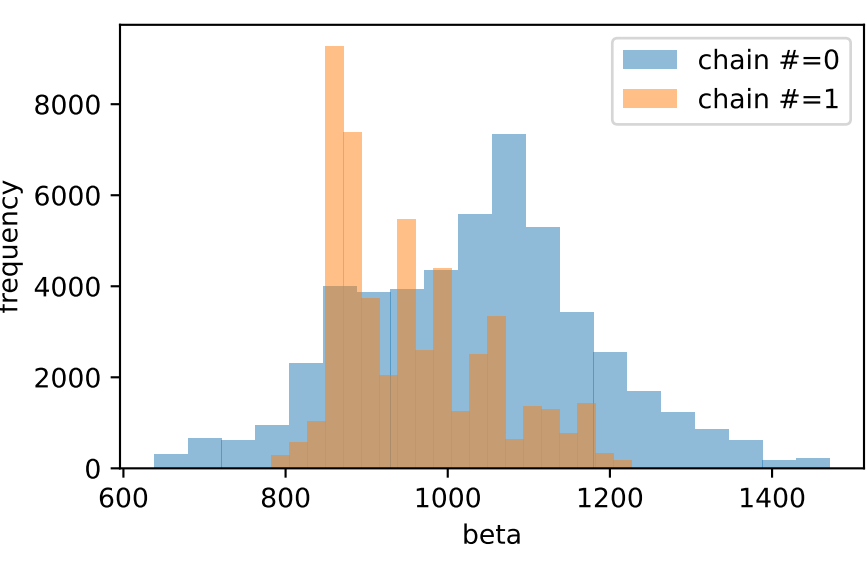
chain #=1
frequency
mu


chain #=0
chain #=1
frequency
phi
1e−5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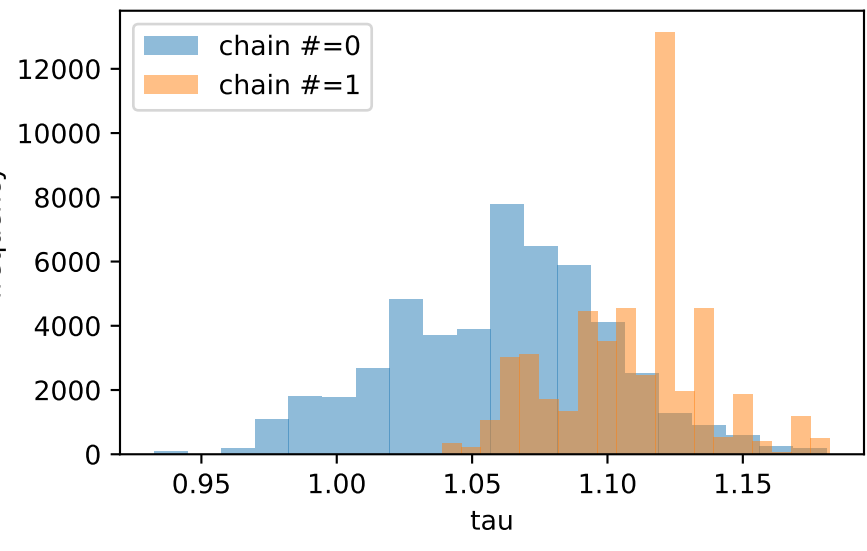
chain #=1
frequency
beta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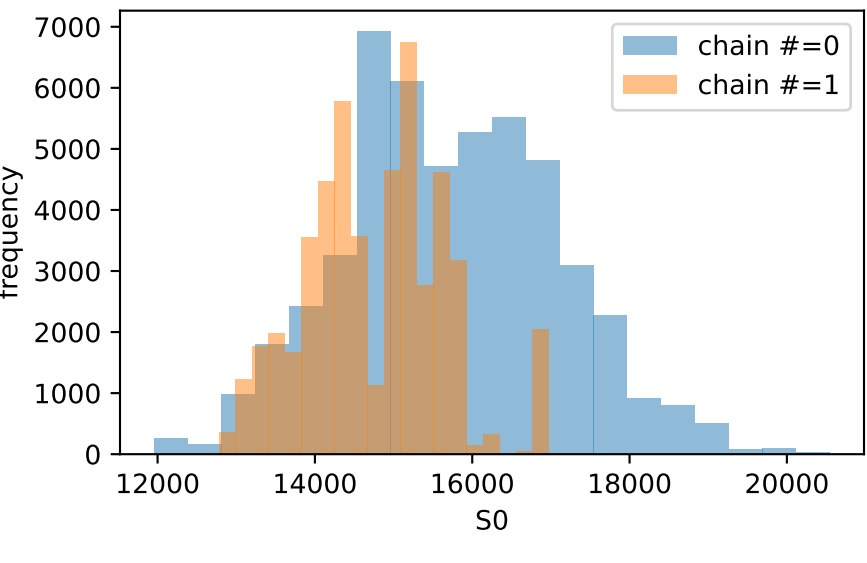
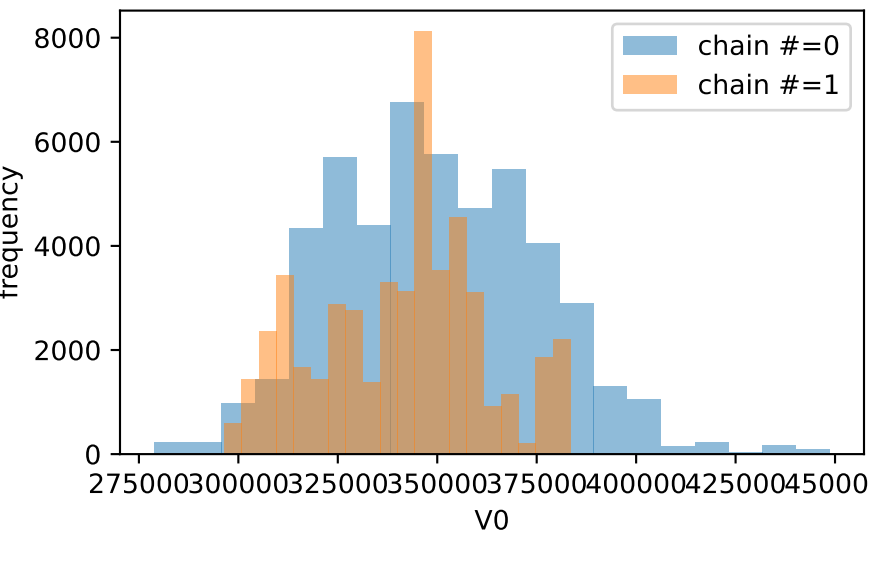
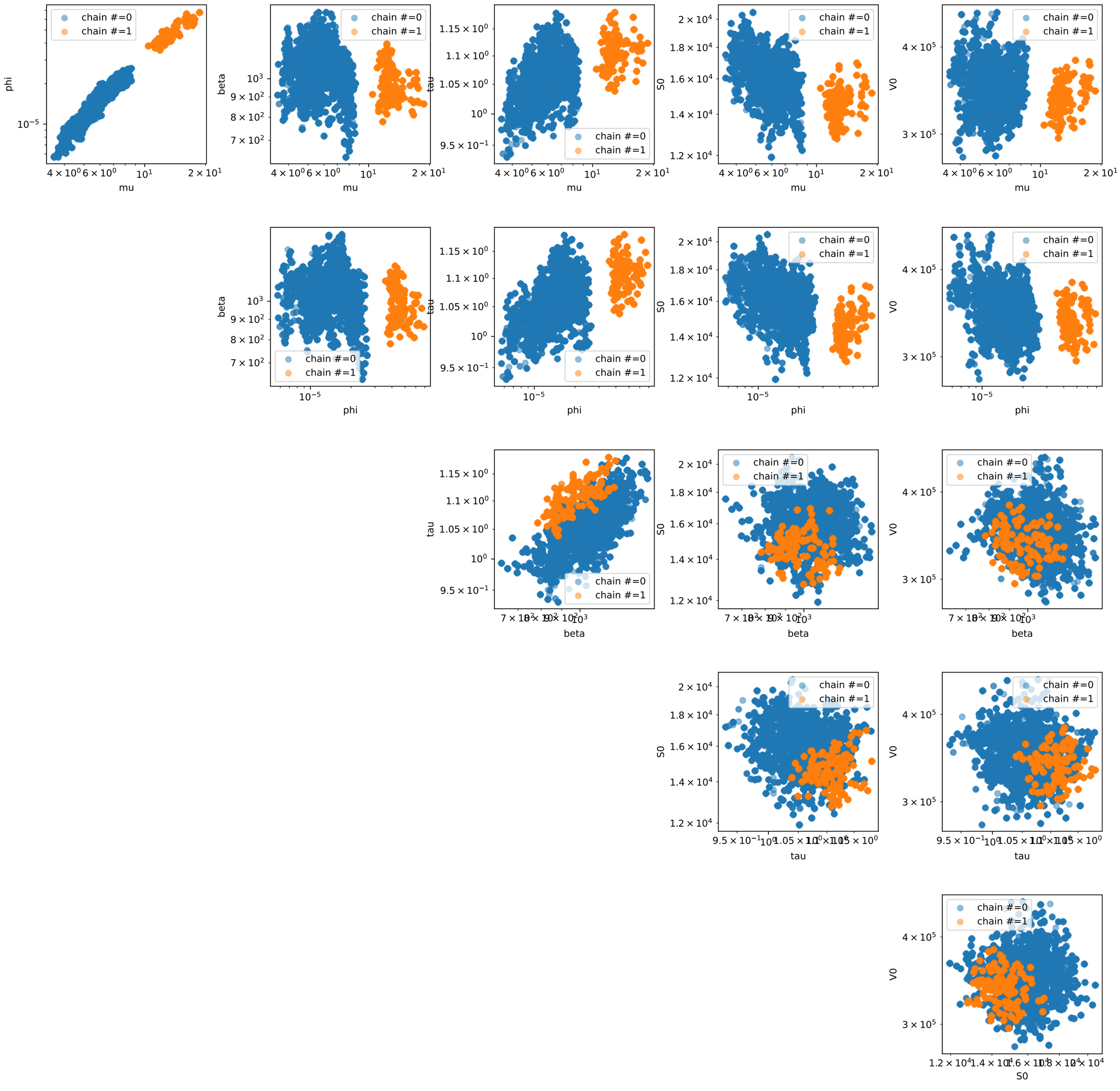
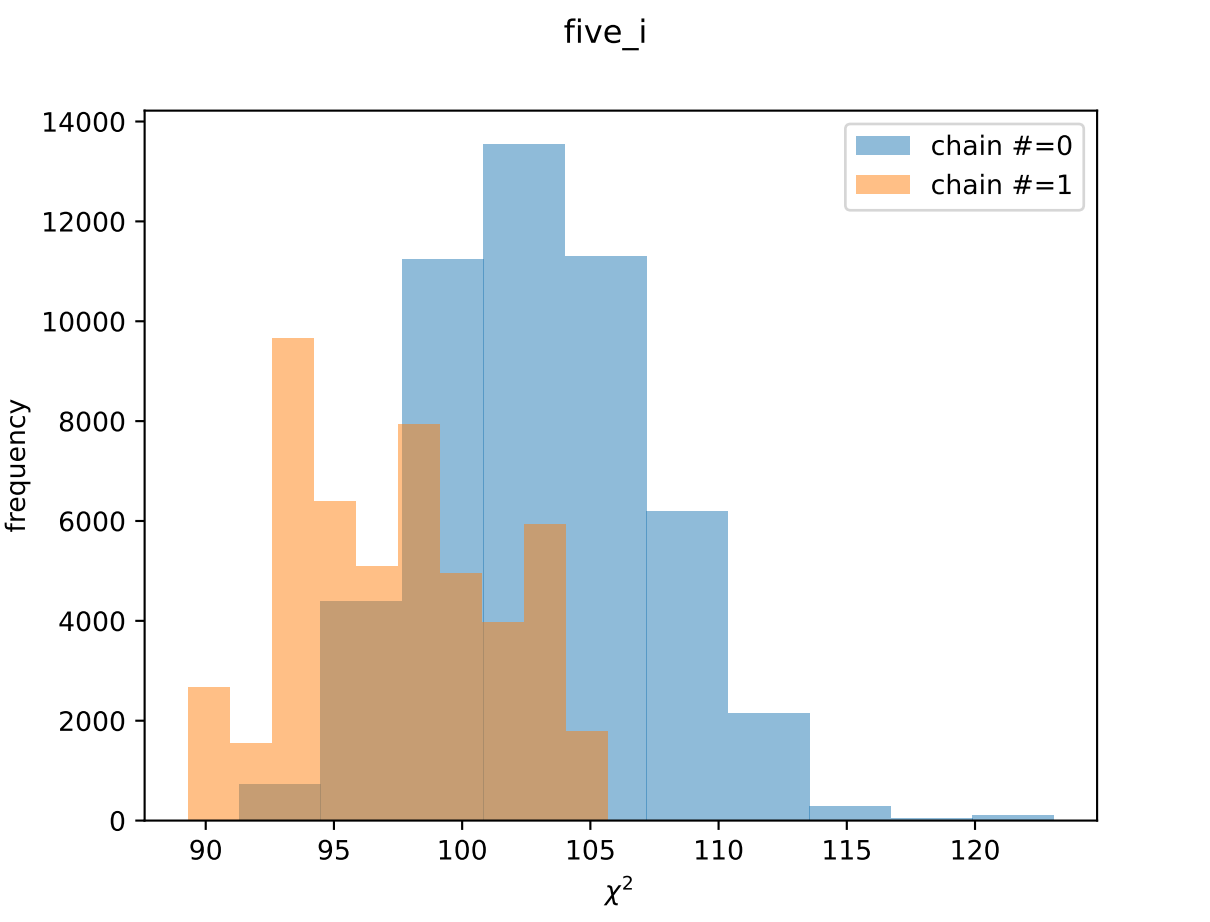
chain #=1
tau

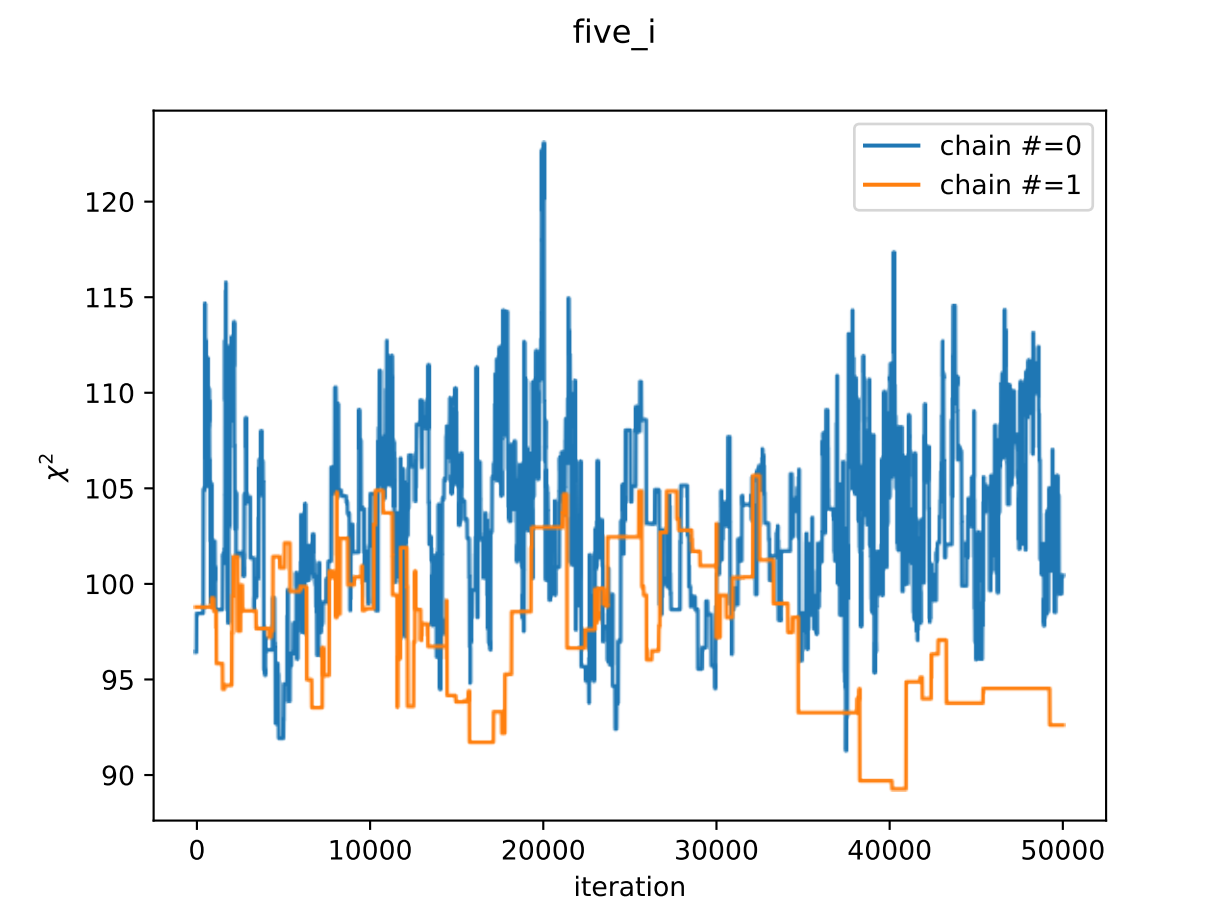

chain #=0
chain #=1
frequency
S0


chain #=0
chain #=1
frequency
V0

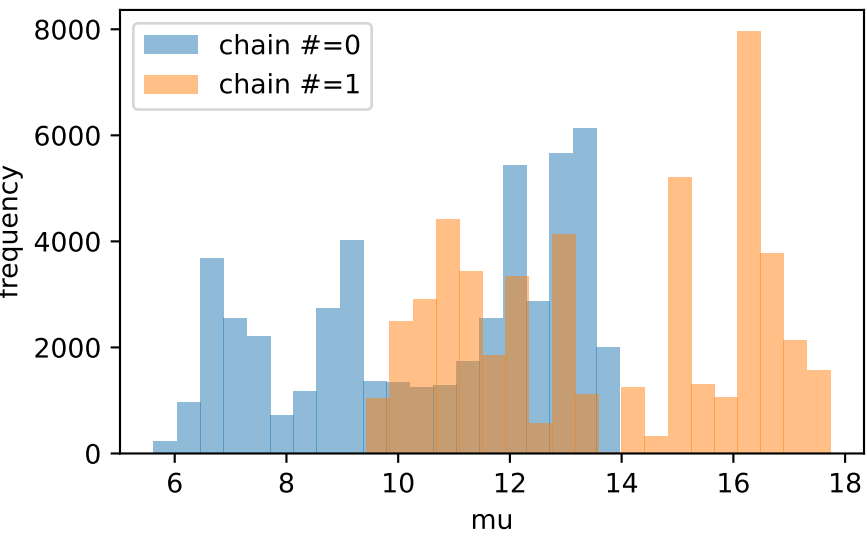
five_i

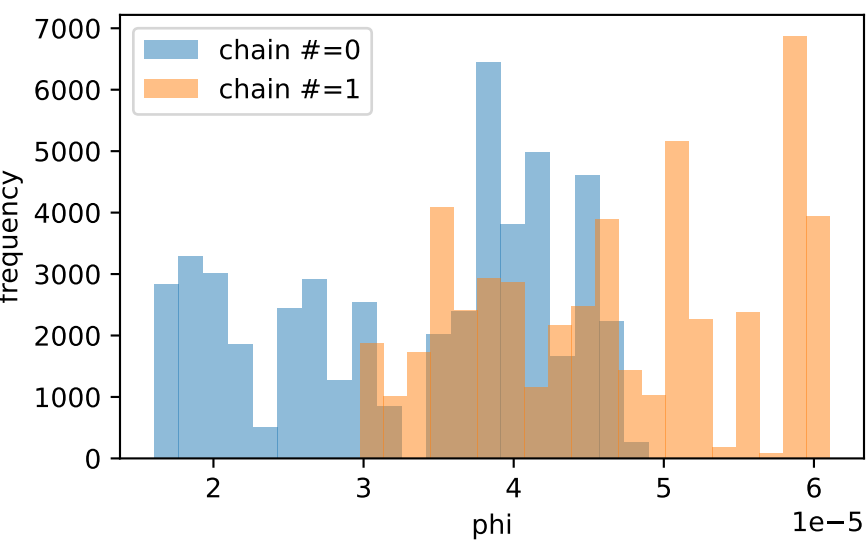


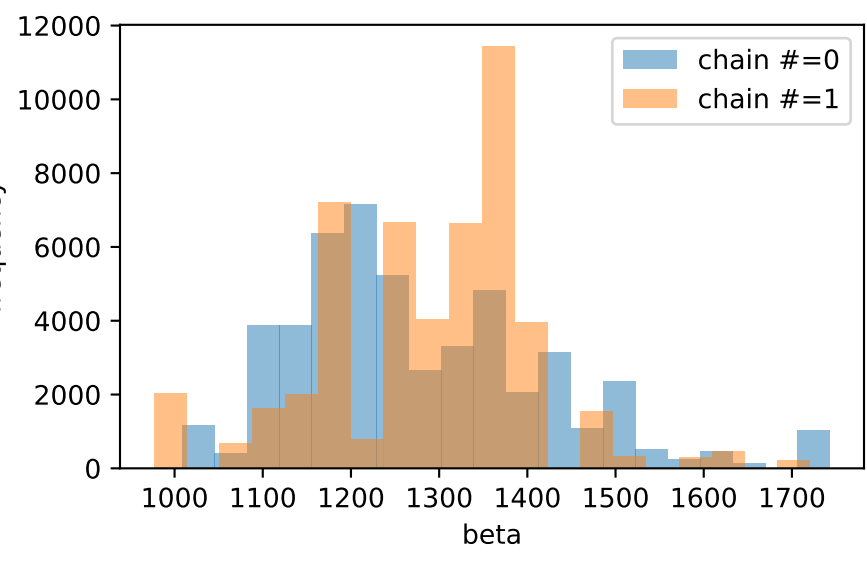

five_i
chain #=0
chain #=1
frequency
14000
12000
10000
8000
6000
4000
2000
0
90
95
100
105
110
115
120
χ^2

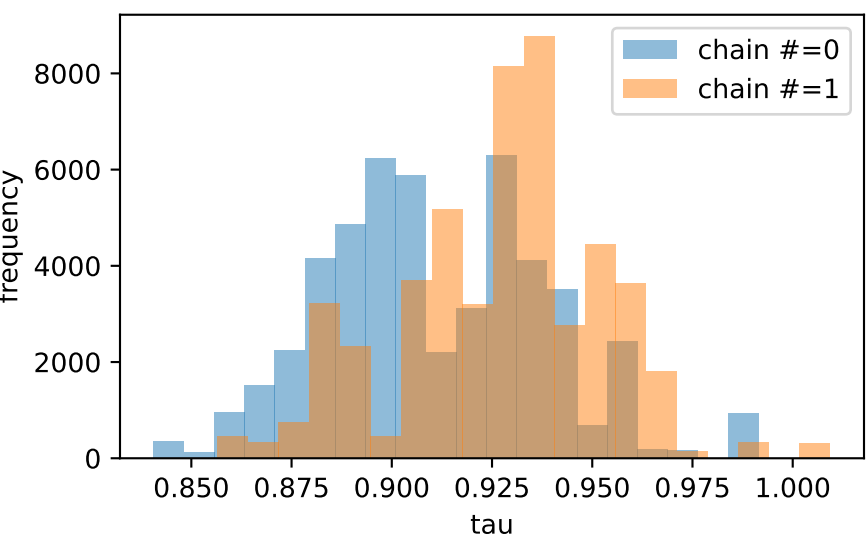

five_i
chain #=0
chain #=1
120
115
110
105
100
95
90
χ^2
0
10000
20000
30000
40000
50000
iteration

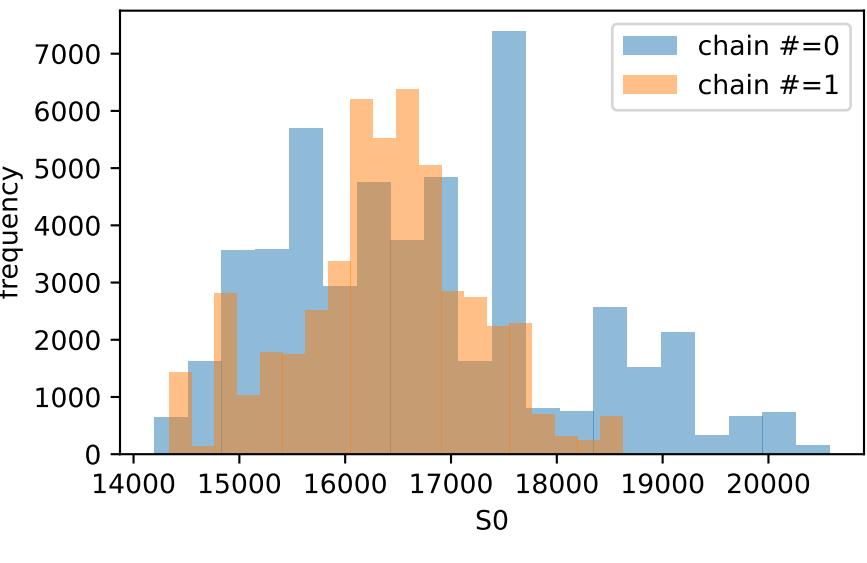
six_i

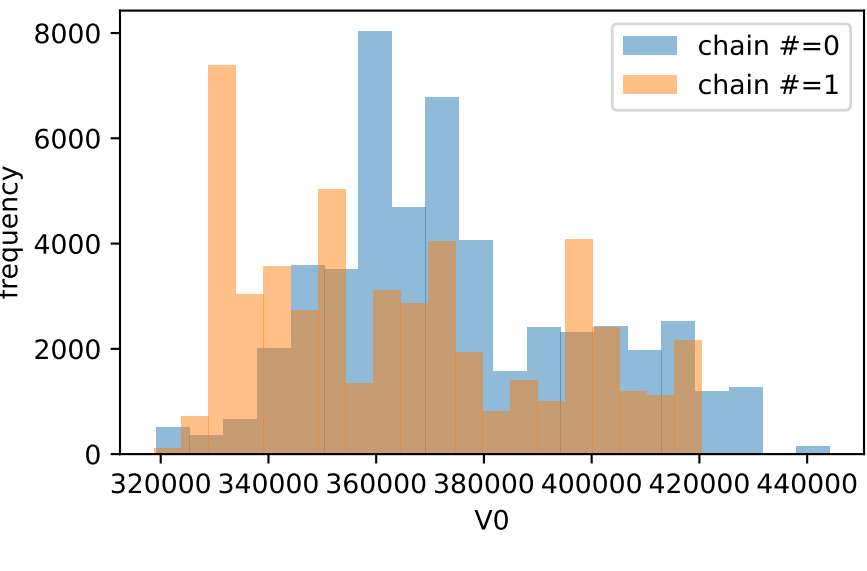

chain #=0
chain #=1
frequency
mu


chain #=0
chain #=1
frequency
phi
1e−5

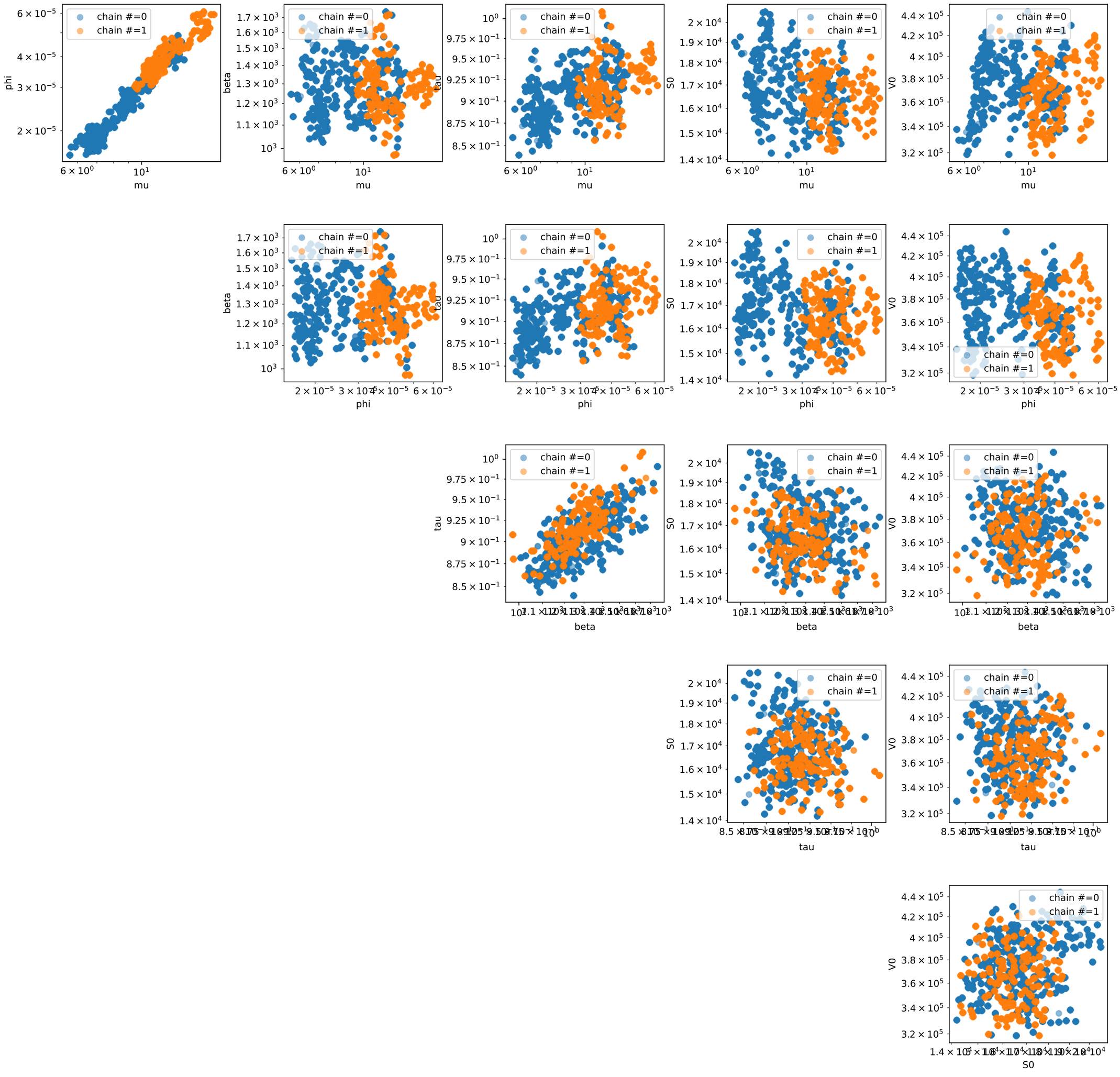

chain #=0
chain #=1
beta

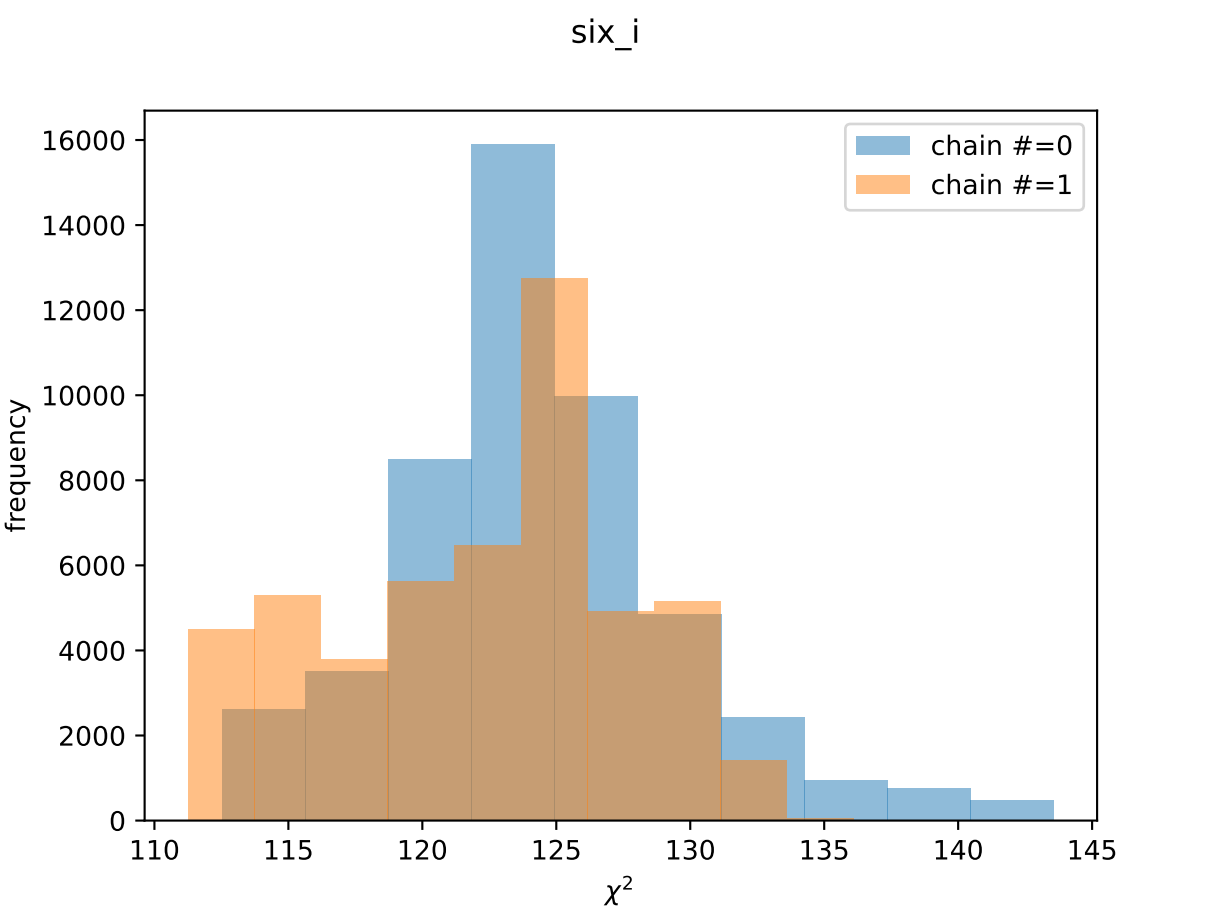

chain #=0
chain #=1
frequency
tau

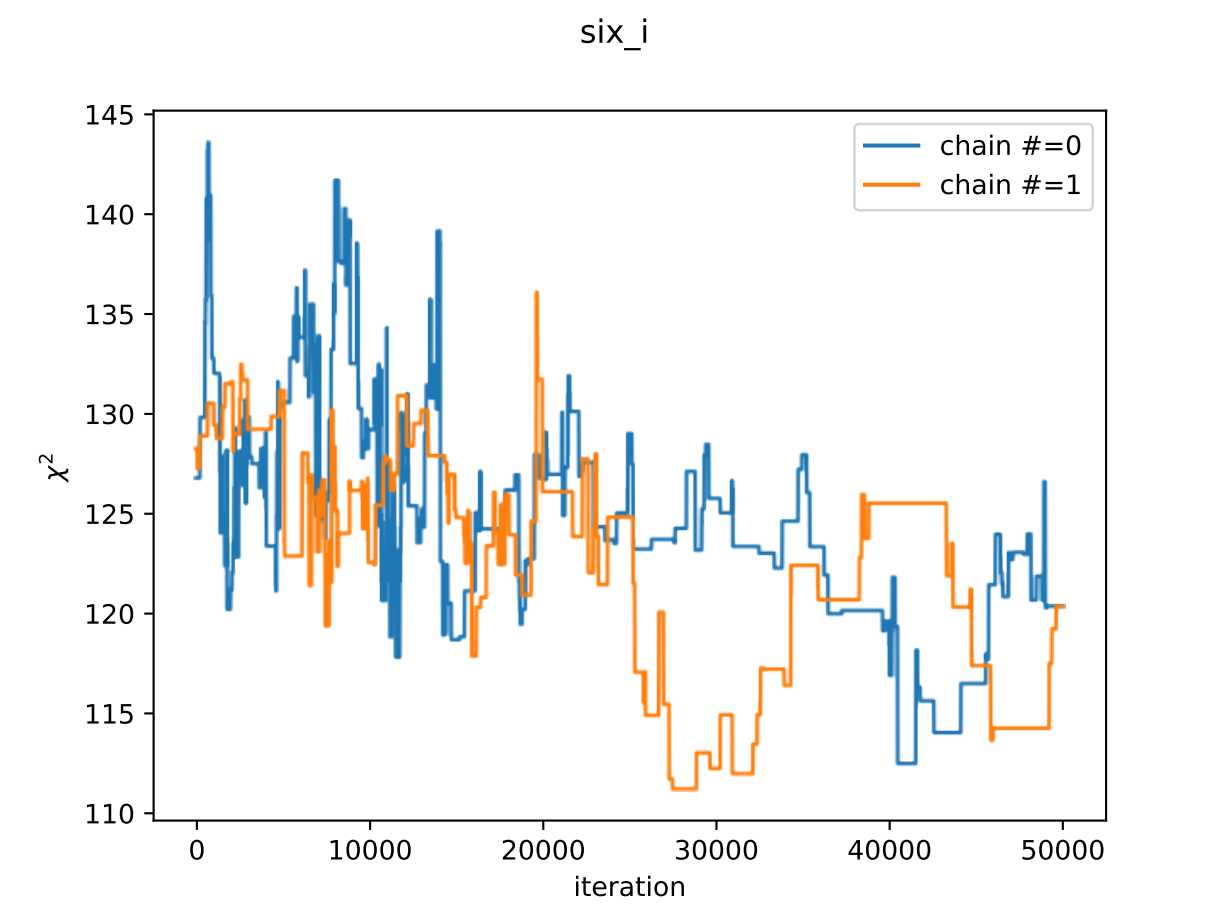

chain #=0
chain #=1
frequency
S0


chain #=0
chain #=1
frequency
V0

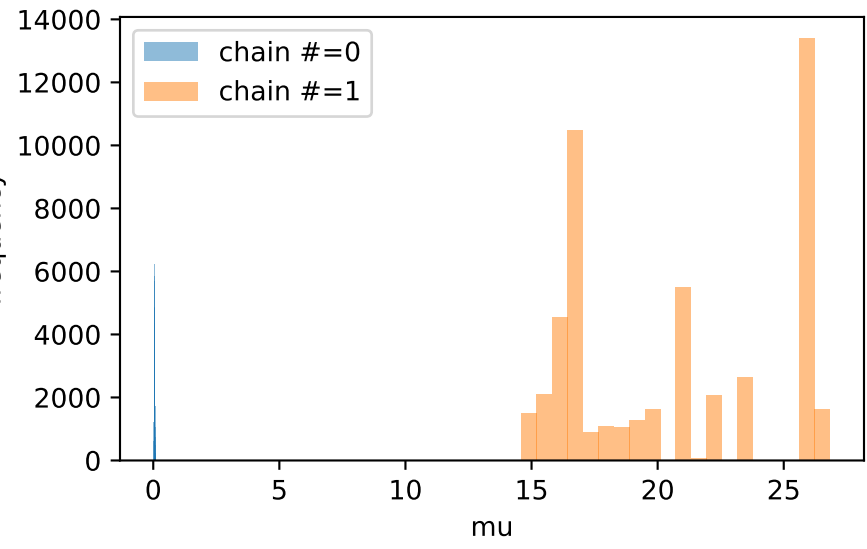
six_i

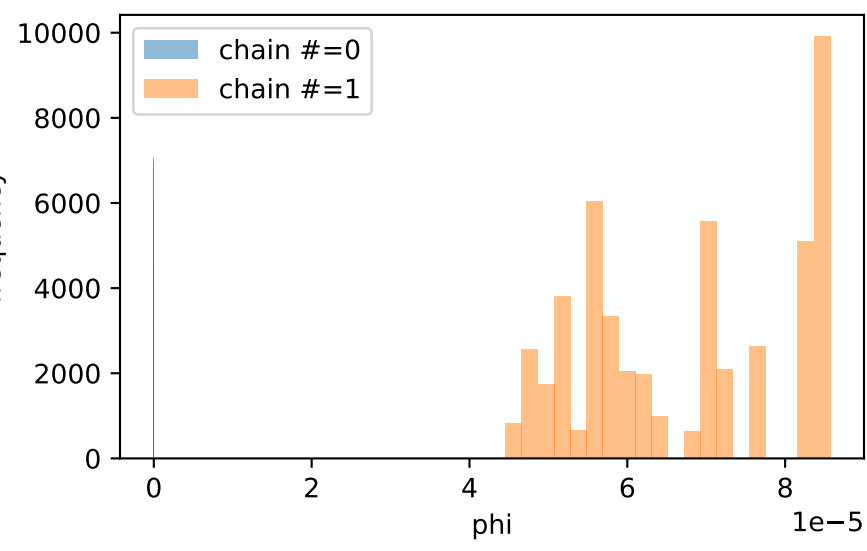


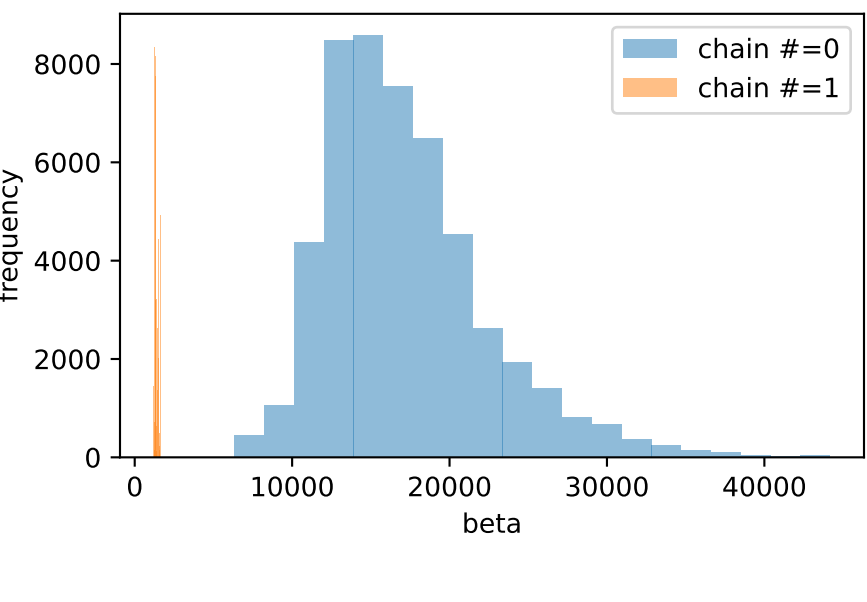

six_i
chain #=0
chain #=1
frequency
16000
14000
12000
10000
8000
6000
4000
2000
0
110
115
120
125
130
135
140
145
χ^2


six_i
chain #=0
chain #=1
χ^2
iteration
145
140
135
130
125
120
115
110
0
10000
20000
30000
40000
50000

seven_i


chain #=0
chain #=1
14000
12000
10000
8000
6000
4000
2000
0
0
5
10
15
20
25
mu


chain #=0
chain #=1
10000
8000
6000
4000
2000
0
0
2
4
6
8
phi
1e−5


chain #=0
chain #=1
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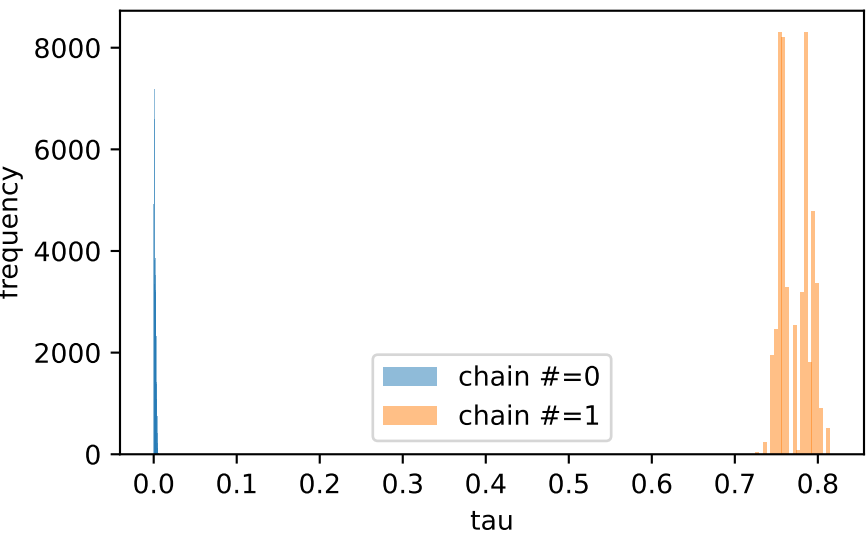
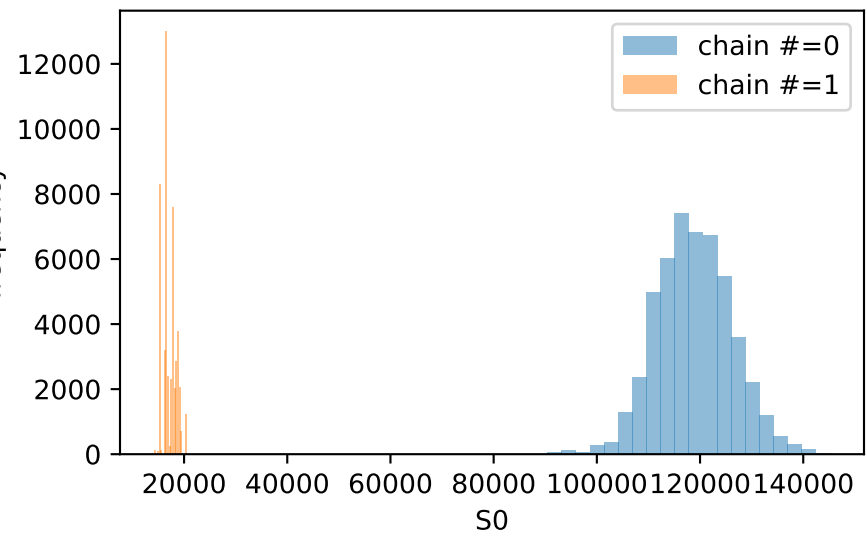
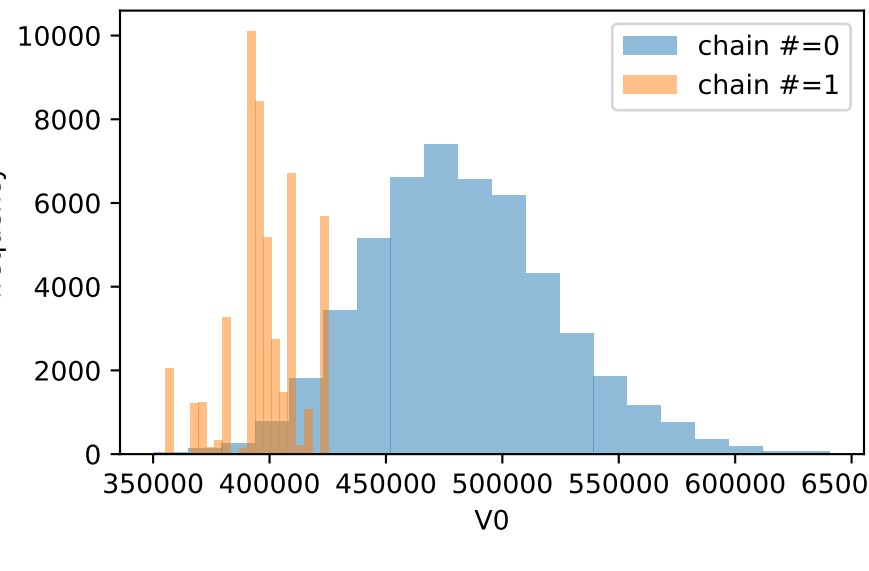
6000
4000
2000
0
frequency
0
10000
20000
30000
40000
beta


chain #=0
chain #=1
8000
6000
4000
2000
0
frequency
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
tau


chain #=0
chain #=1
12000
10000
8000
6000
4000
2000
0
20000
40000
60000
80000
100000
120000
140000
S0


chain #=0
chain #=1
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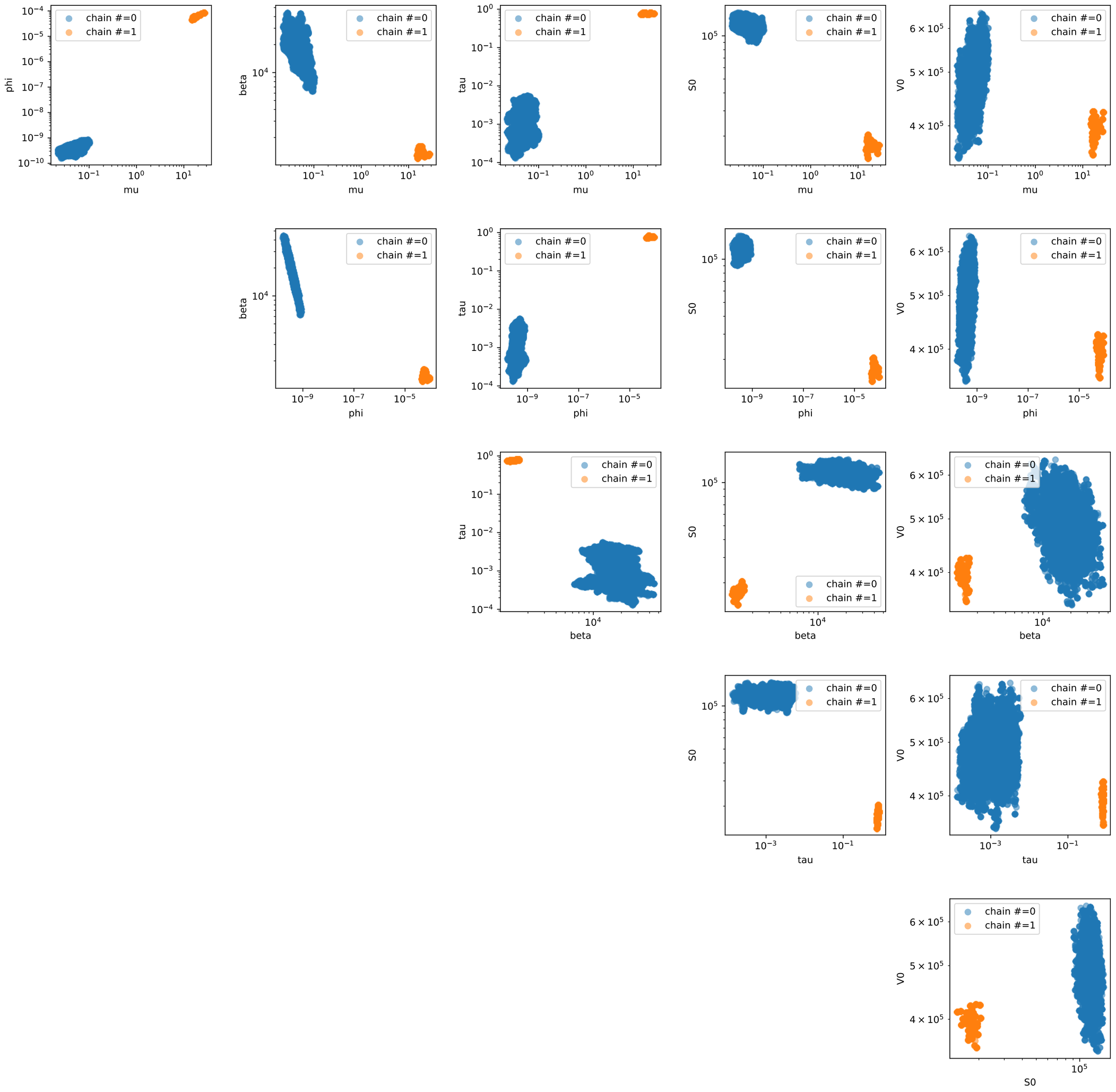
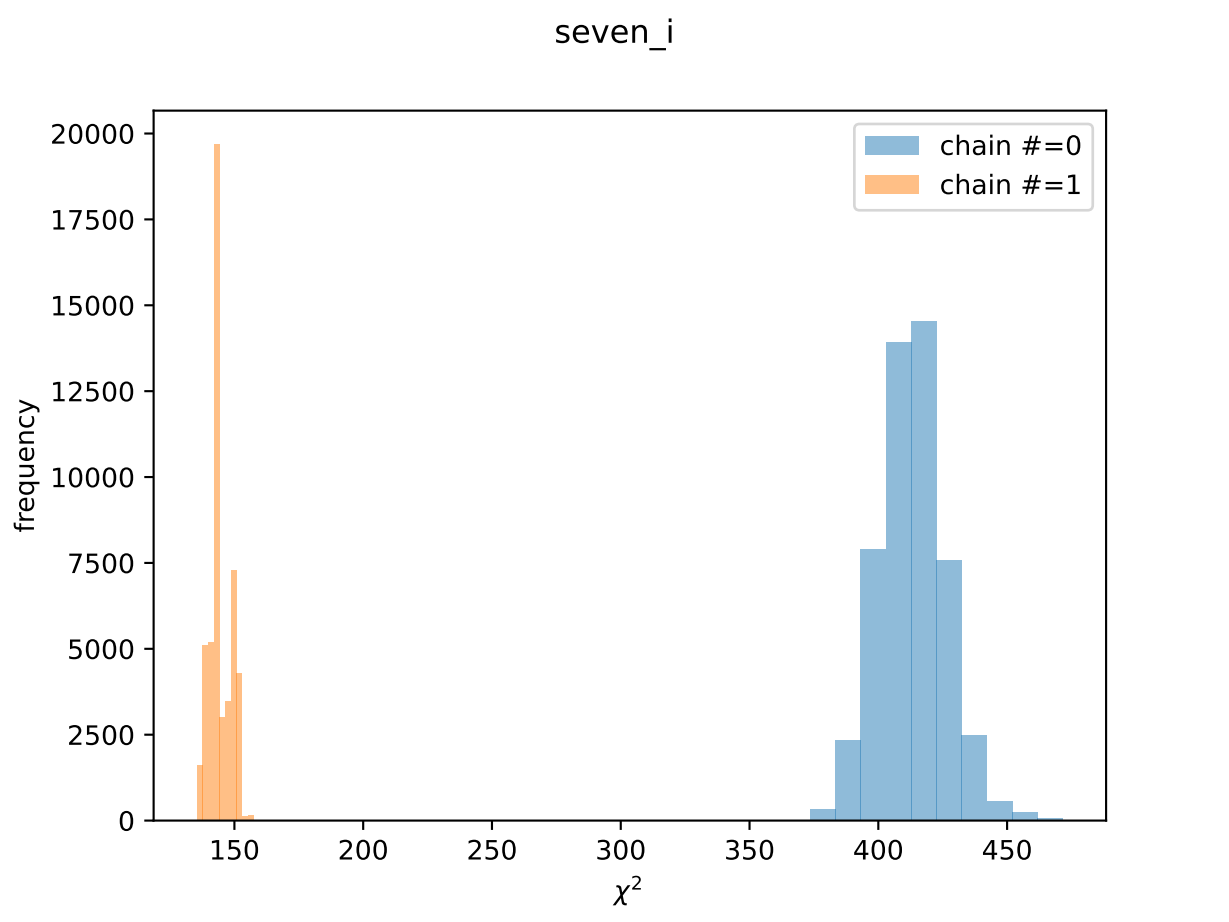
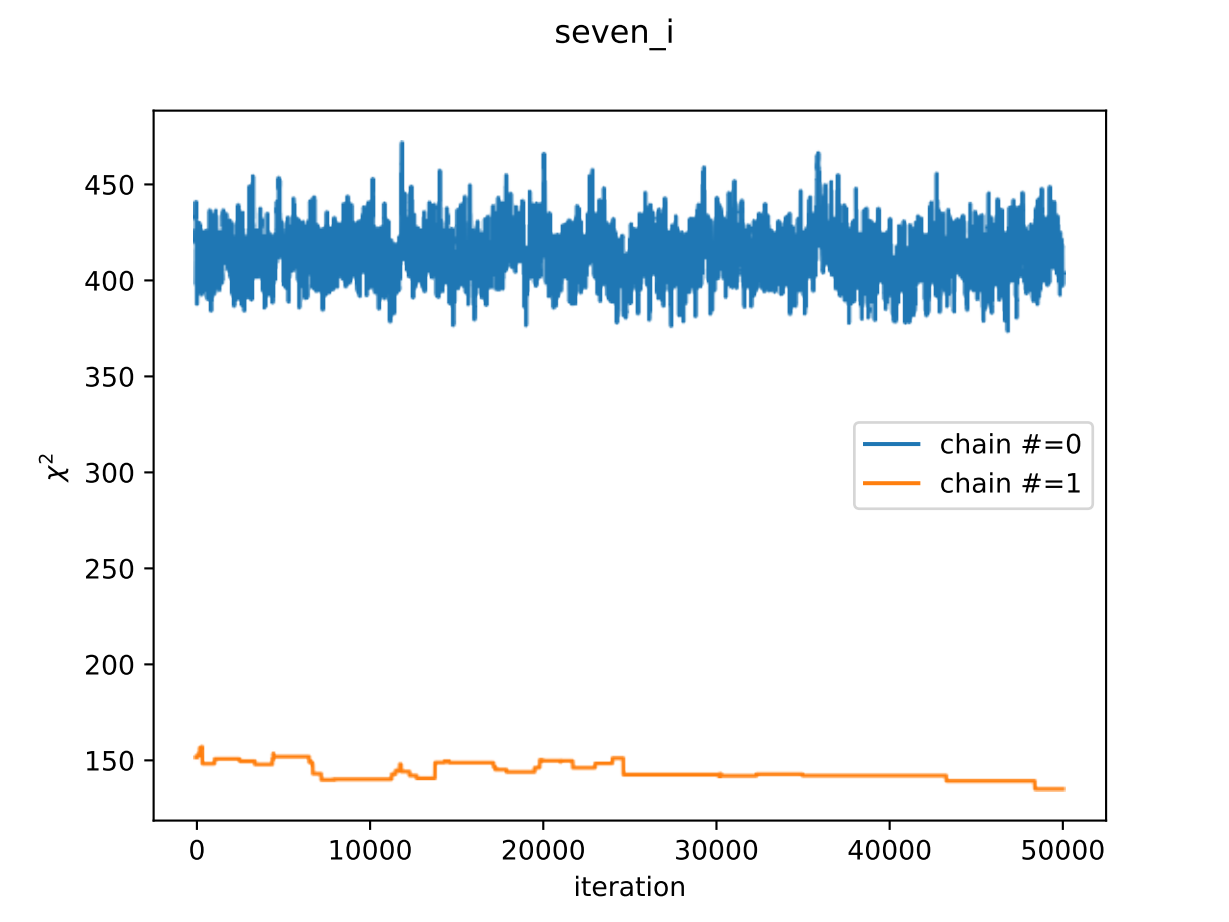
8000
6000
4000
2000
0
350000
400000
450000
500000
550000
600000
650000
V0

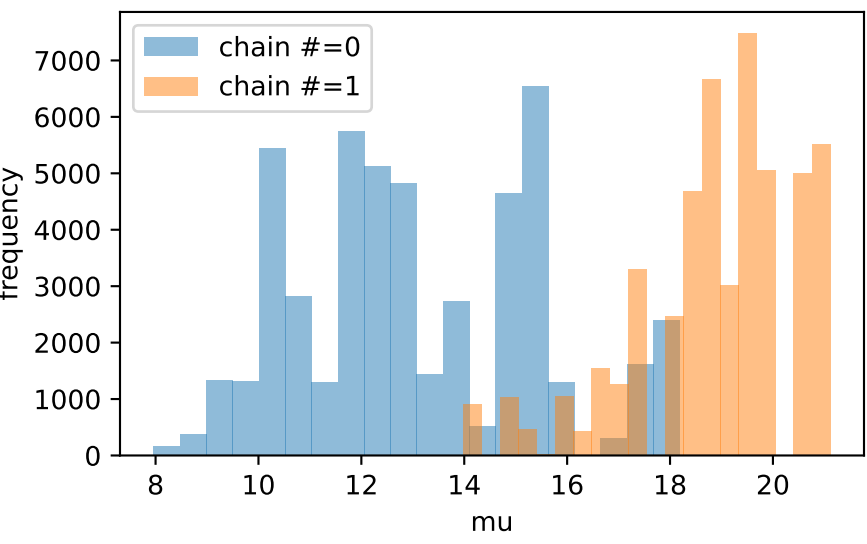
seven_i

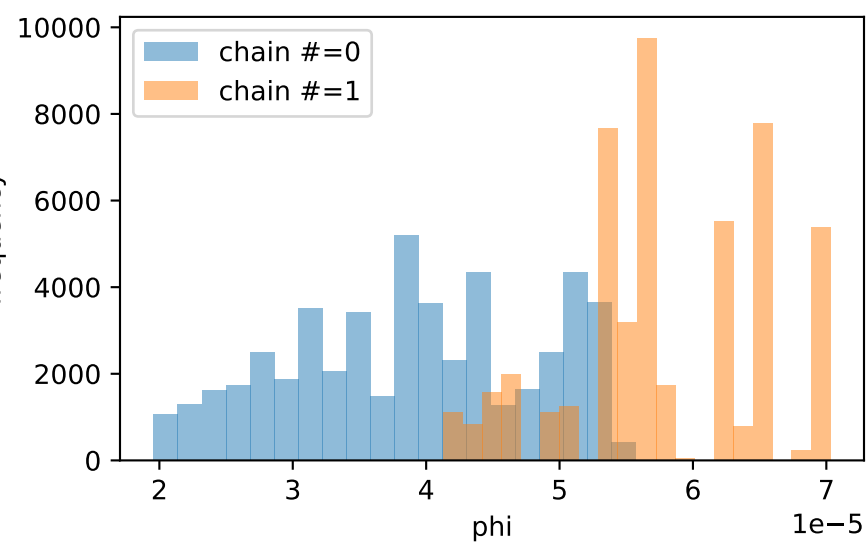


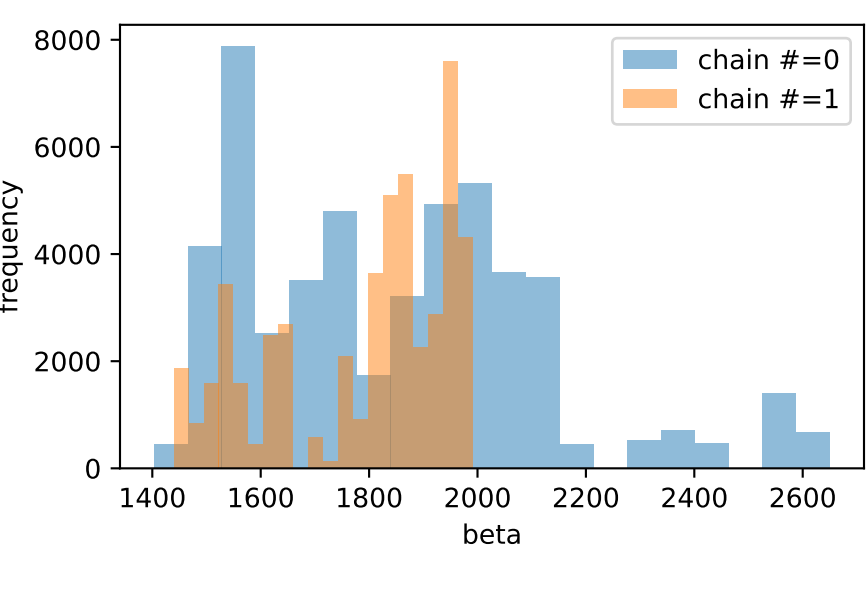

seven_i
chain #=0
chain #=1
frequency
20000
17500
15000
12500
10000
7500
5000
2500
0
150
200
250
300
350
400
450
χ^2

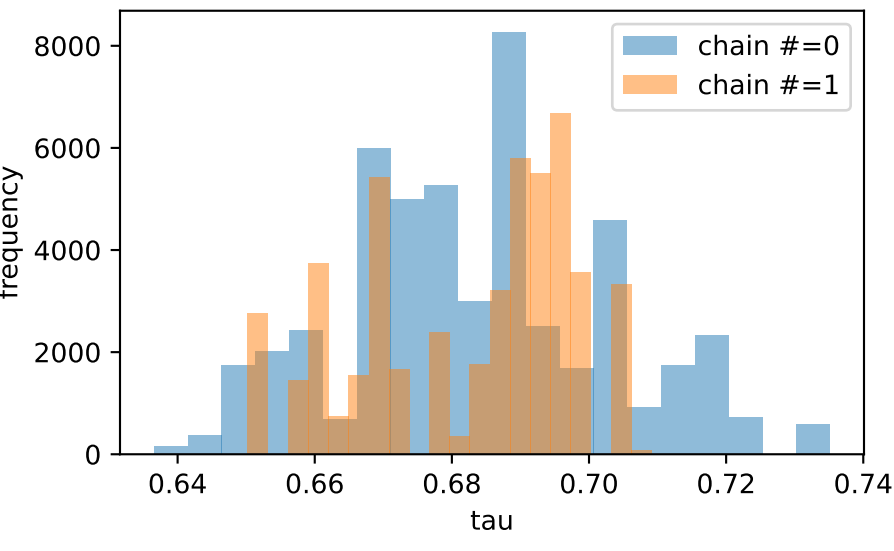

seven_i
450
400
350
300
250
200
150
χ^2
chain #=0
chain #=1
0
10000
20000
30000
40000
50000
iteration

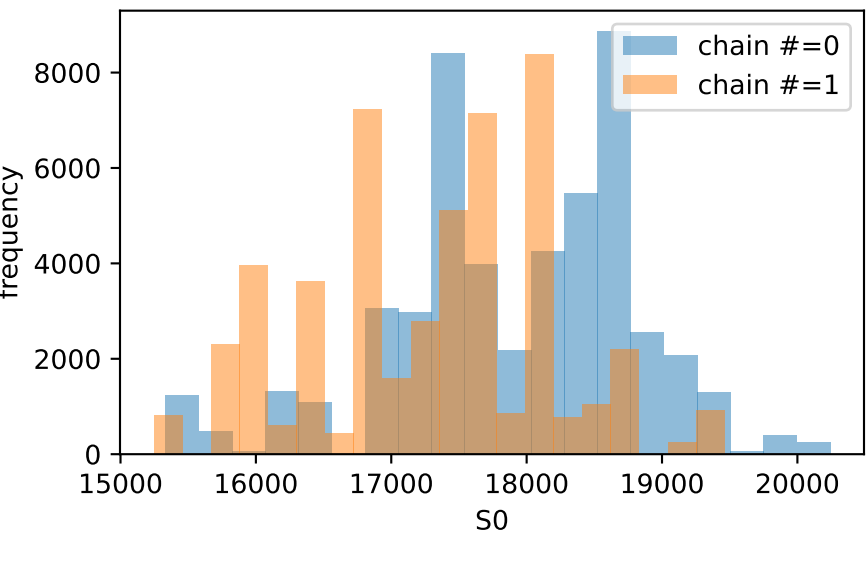
eight_i

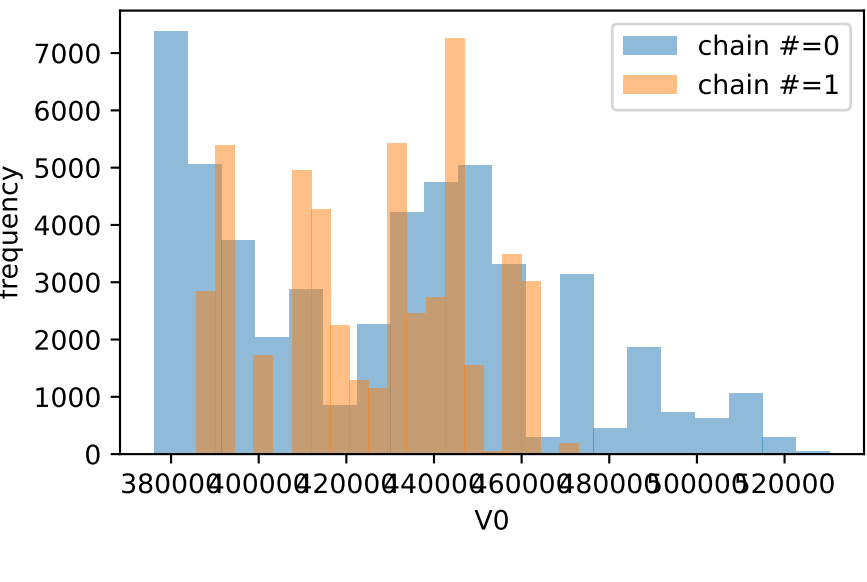

chain #=0
chain #=1
frequency
mu


chain #=0
chain #=1
phi
1e−5

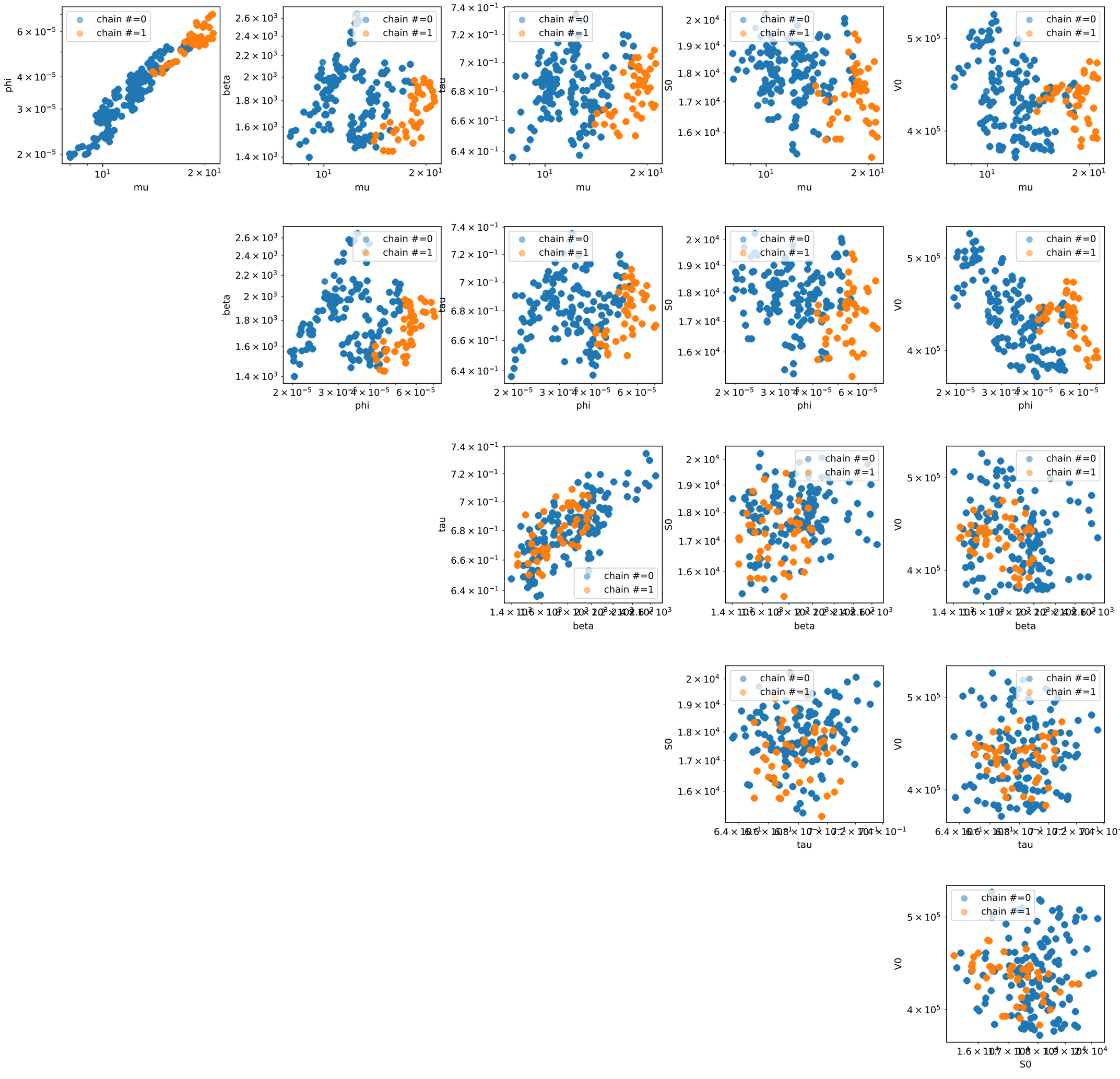

chain #=0
chain #=1
frequency
beta

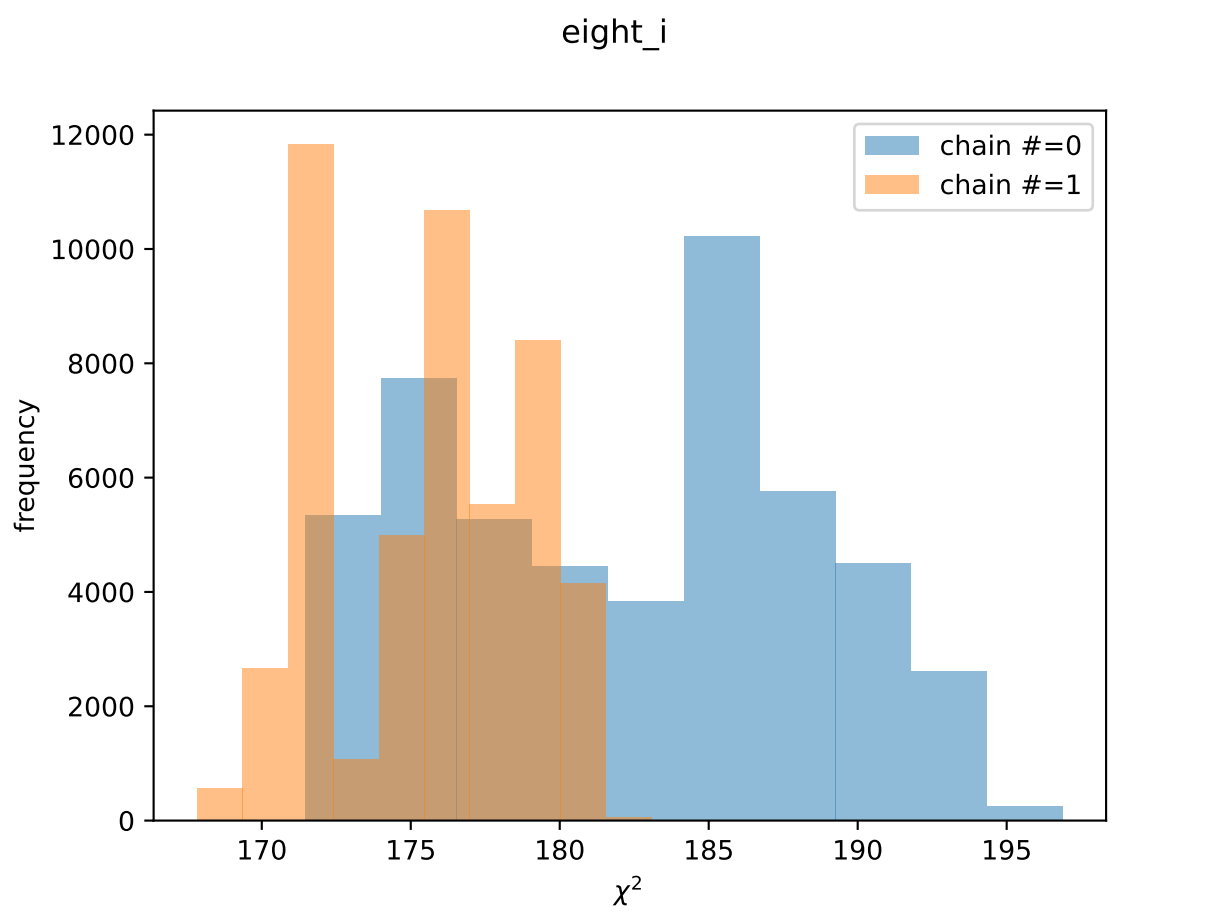

chain #=0
chain #=1
frequency
tau

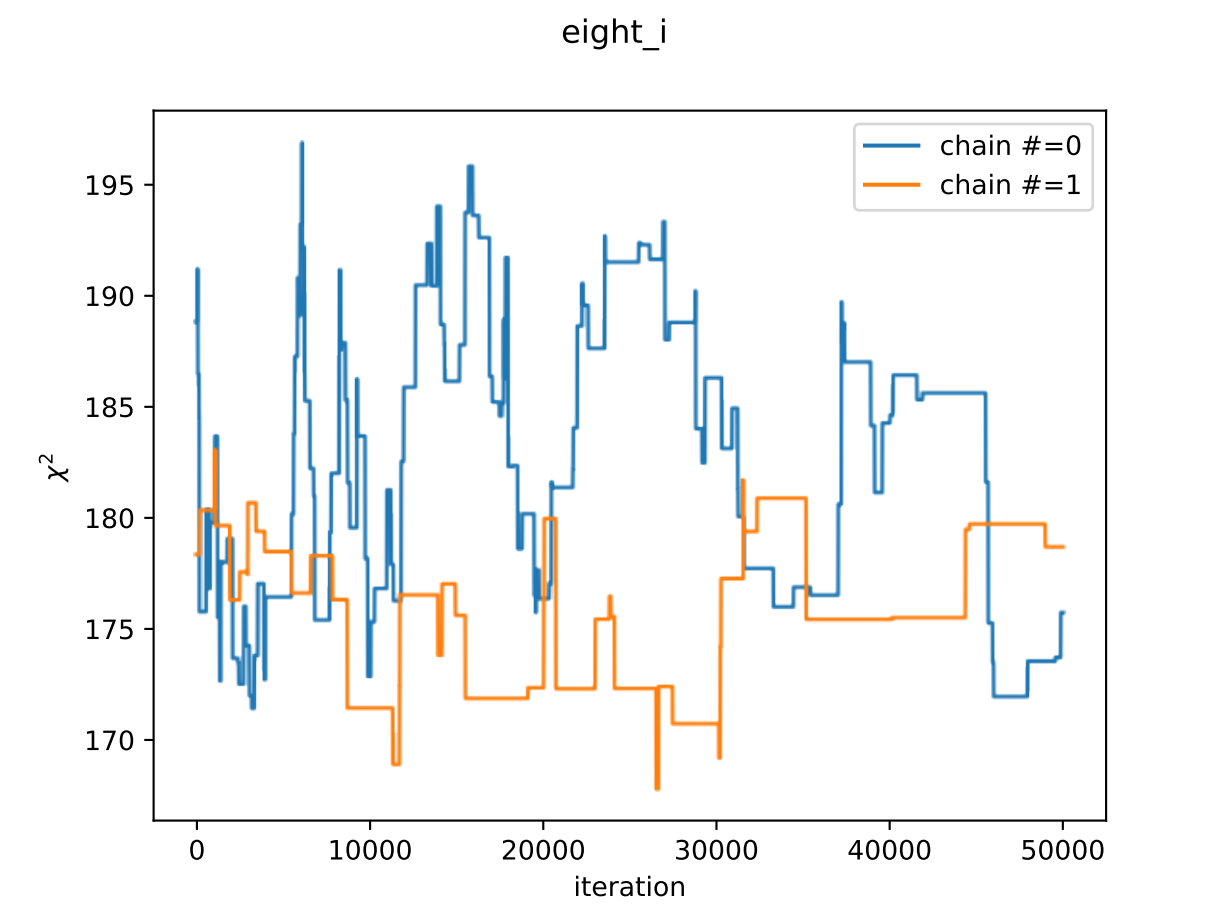

chain #=0
chain #=1
frequency
S0


chain #=0
chain #=1
frequency
V0

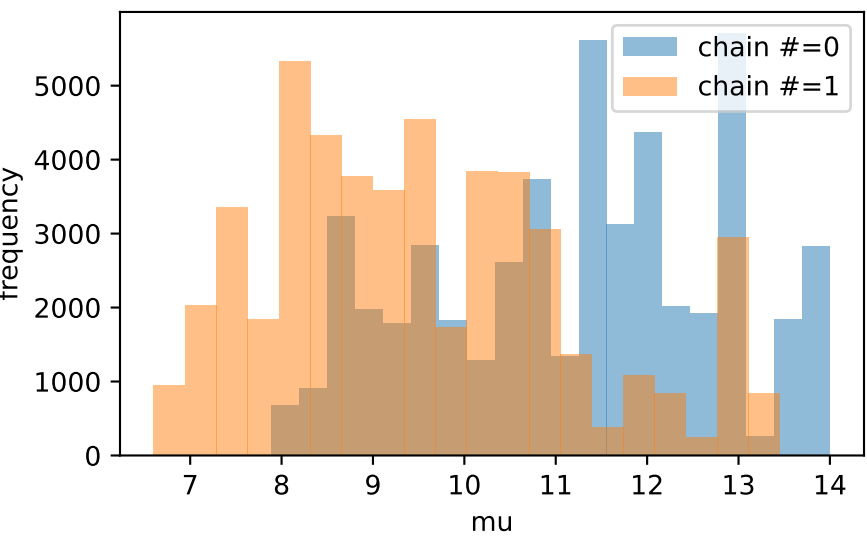
eight_i

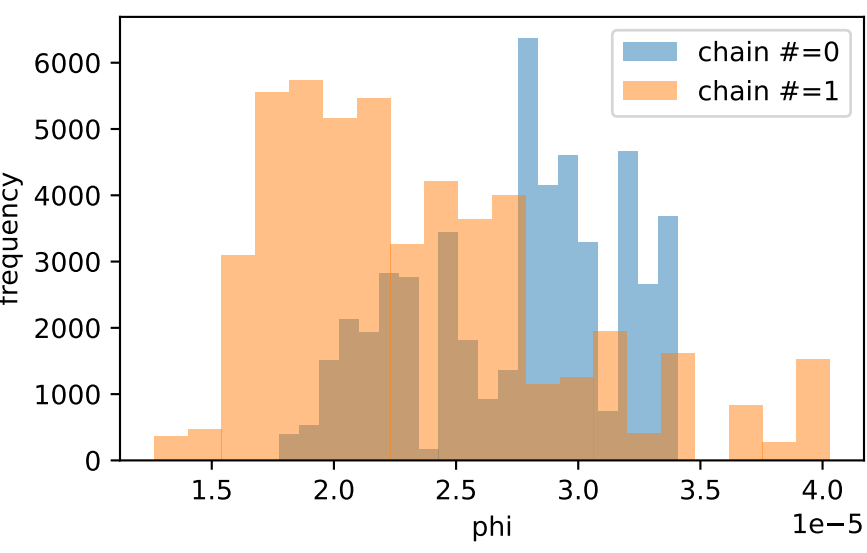


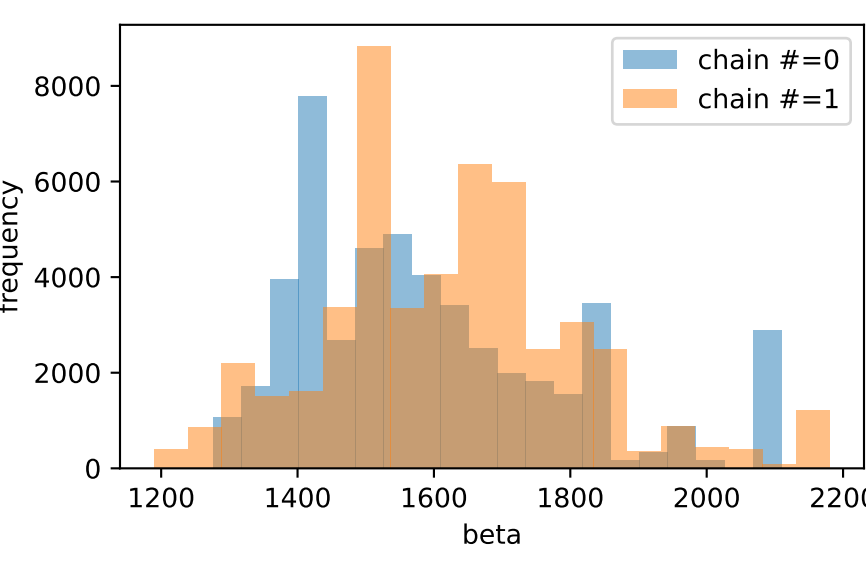

eight_i
chain #=0
chain #=1
frequency
12000
10000
8000
6000
4000
2000
0
170
175
180
185
190
195
χ^2

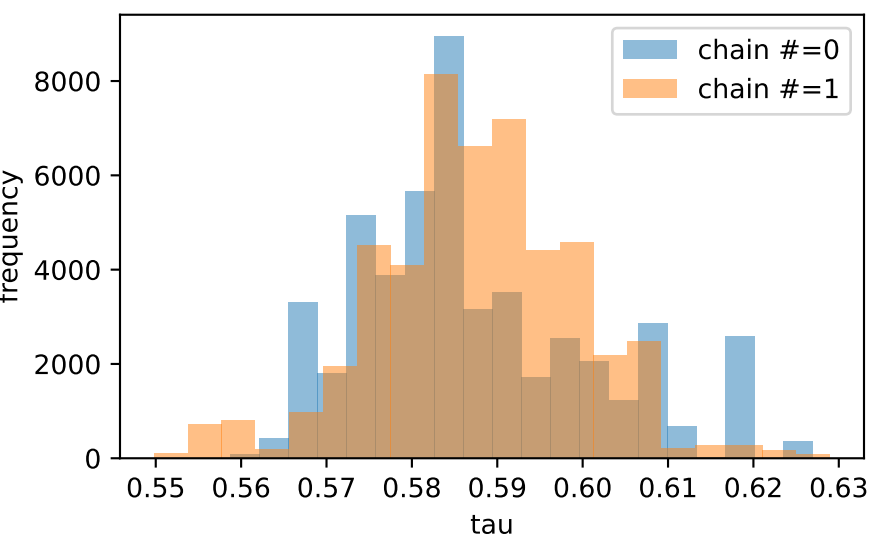

eight_i
chain #=0
chain #=1
195
190
185
180
175
170
χ^2
0
10000
20000
30000
40000
50000
iteration

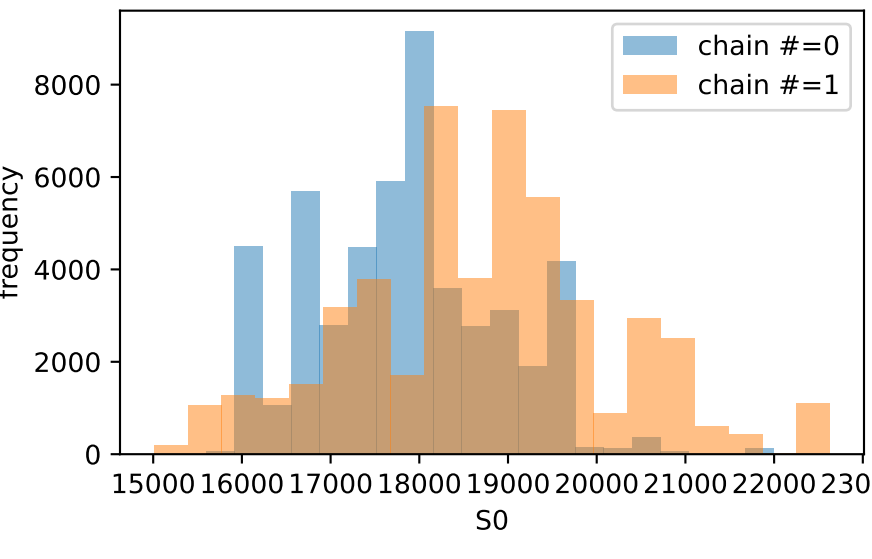
nine_i

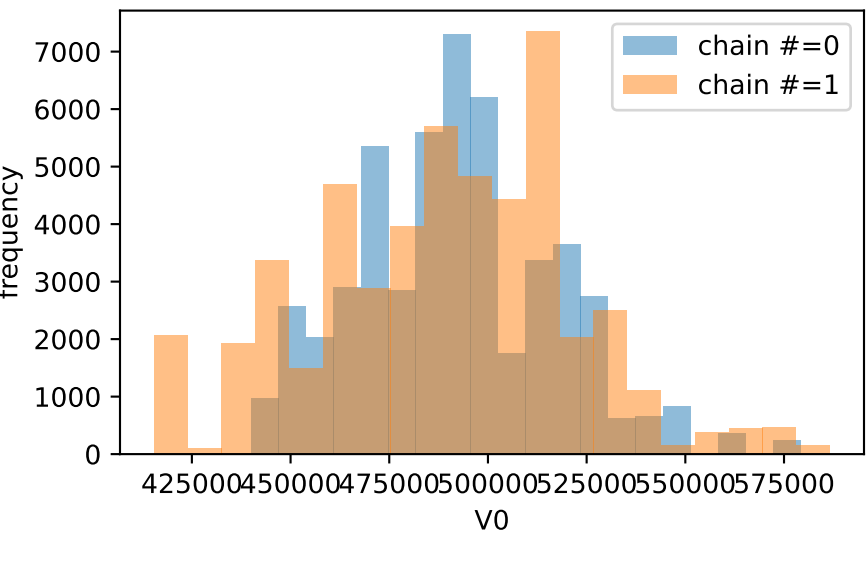

chain #=0
chain #=1
frequency
mu


chain #=0
chain #=1
frequency
phi
1e−5

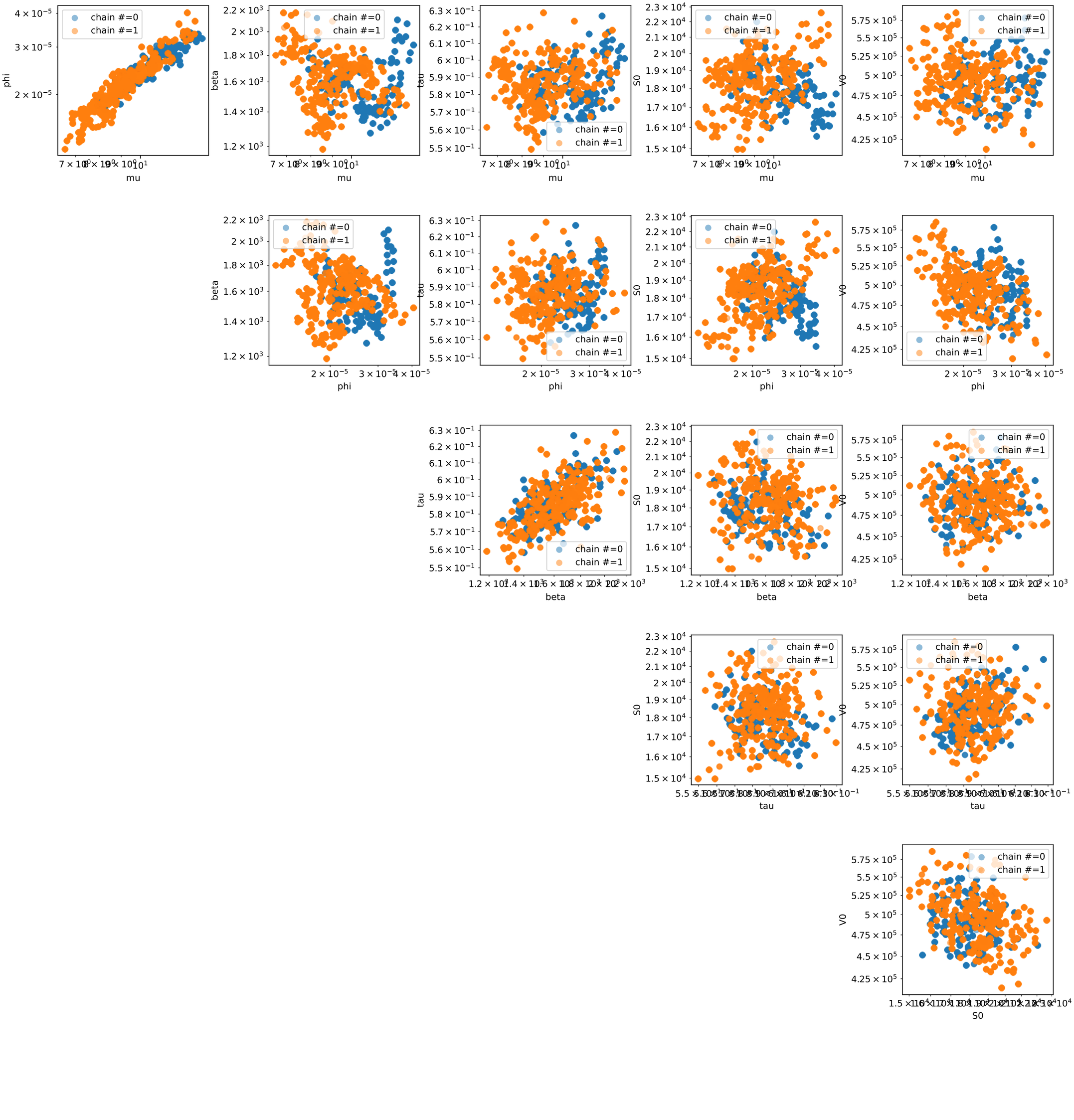

chain #=0
chain #=1
frequency
beta

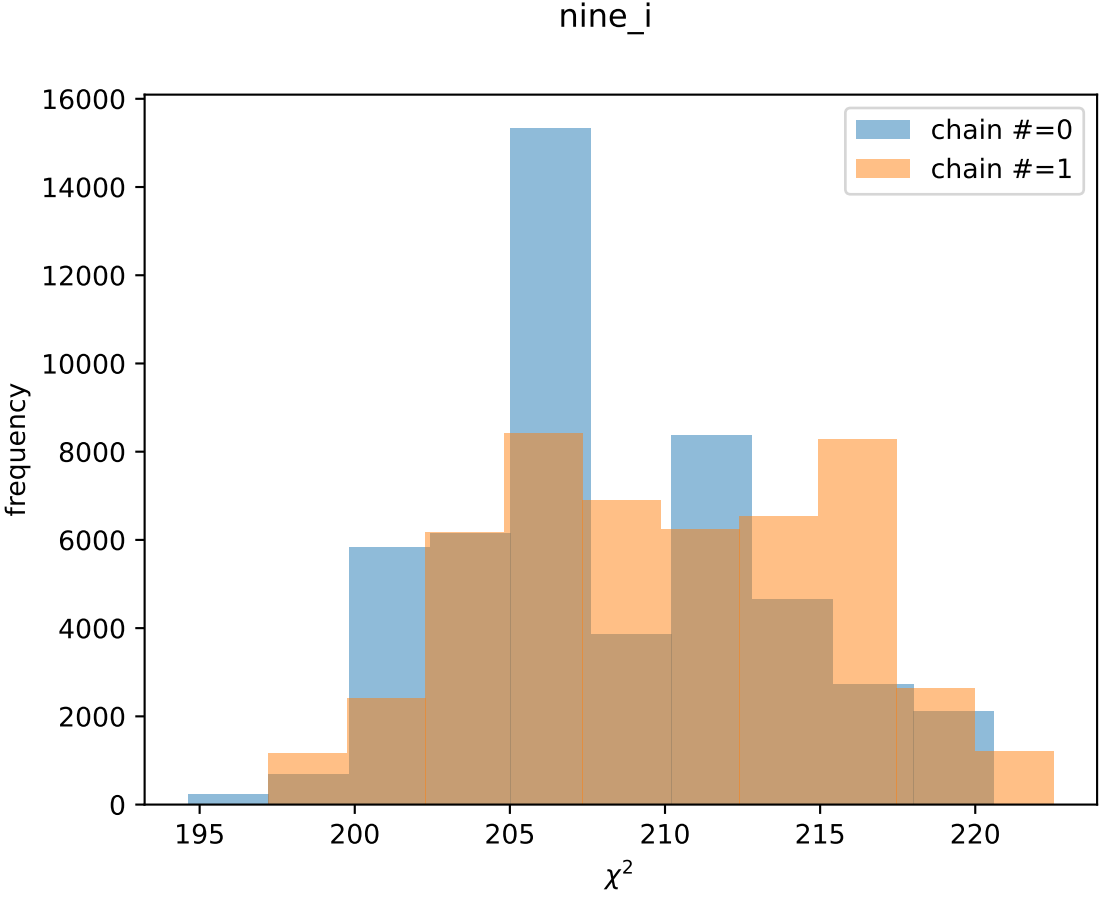

chain #=0
chain #=1
frequency
tau

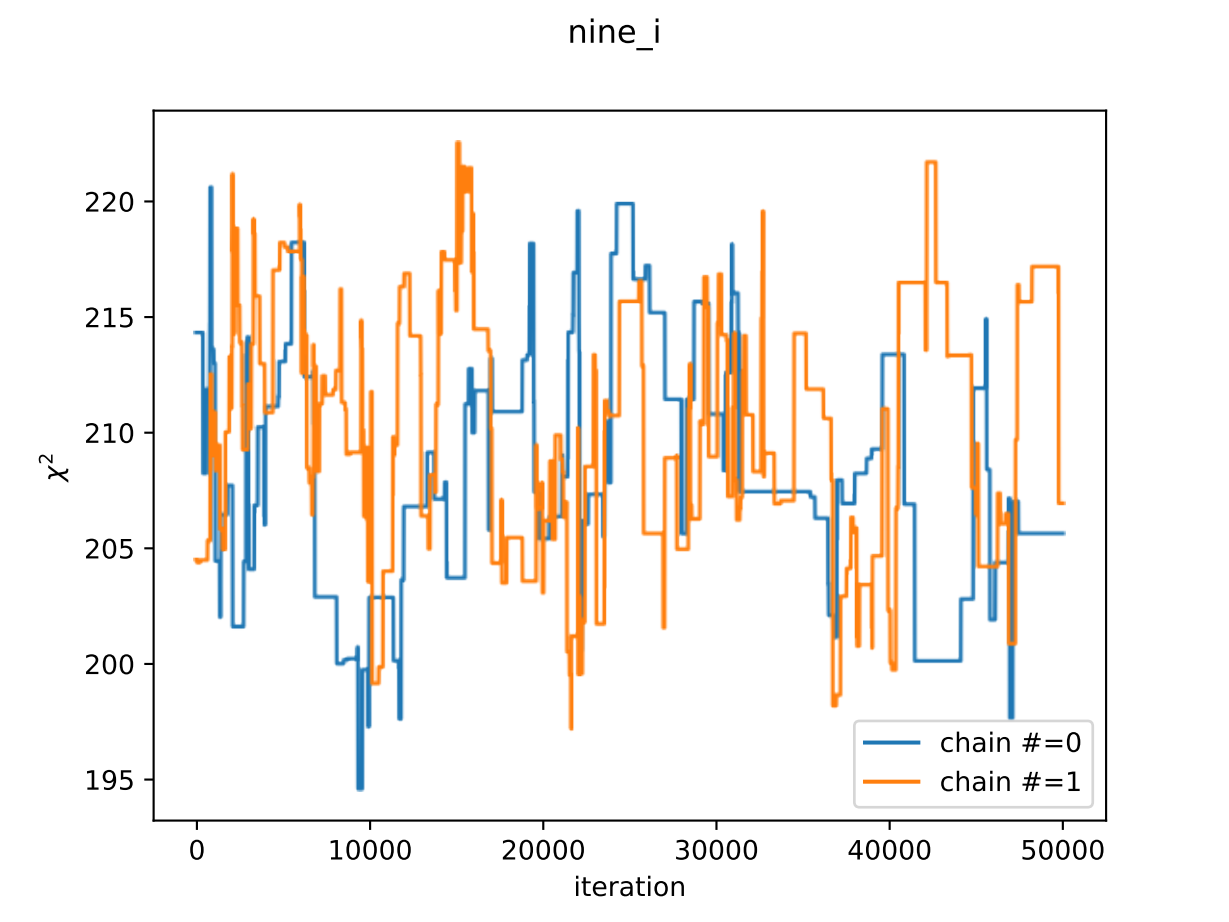

chain #=0
chain #=1
frequency
S0


chain #=0
chain #=1
frequency
V0

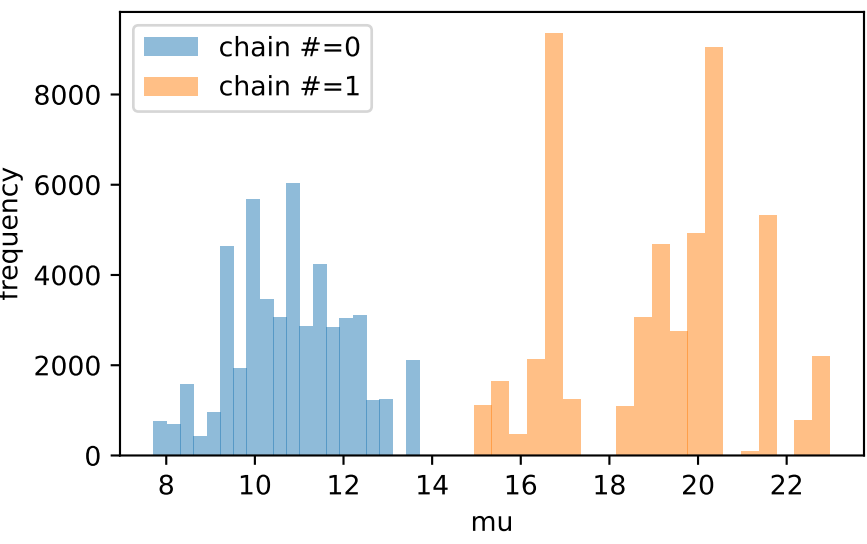
nine_i




nine_i
chain #=0
chain #=1
16000
14000
12000
10000
8000
6000
4000
2000
0
frequency
195
200
205
210
215
220
χ^2


nine_i
220
215
210
205
200
195
χ^2
0
10000
20000
30000
40000
50000
iteration
chain #=0
chain #=1

ten_i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frequency
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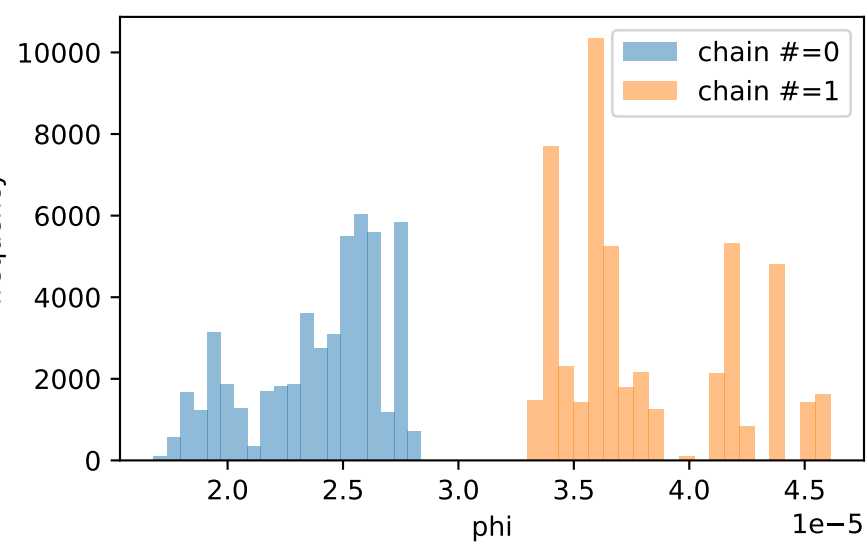
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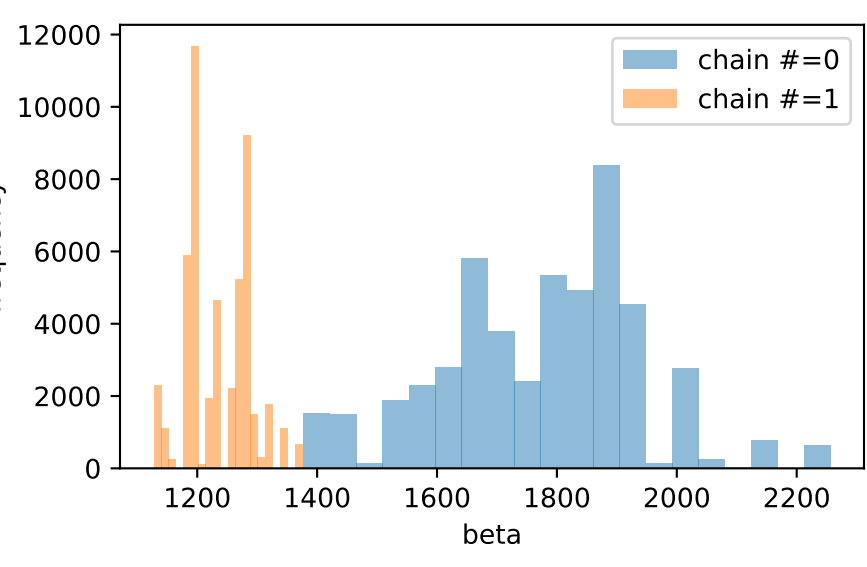
phi
1e−5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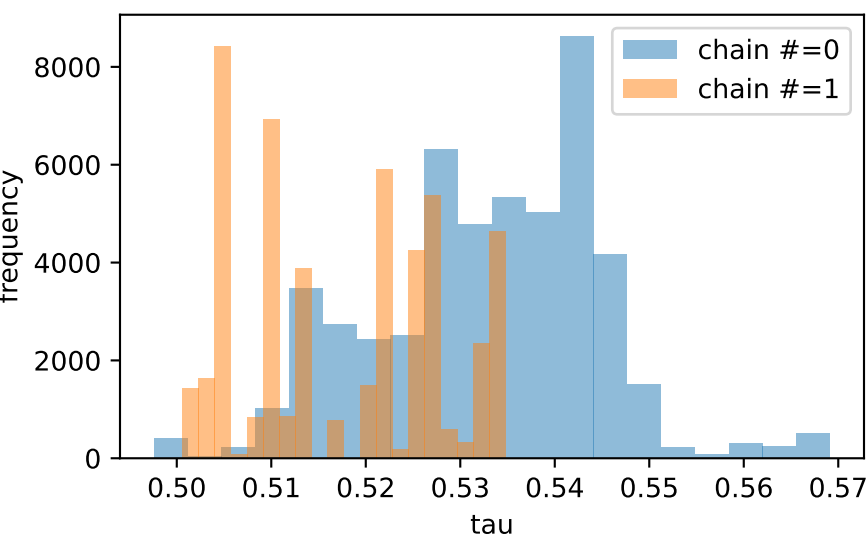
chain #=1
beta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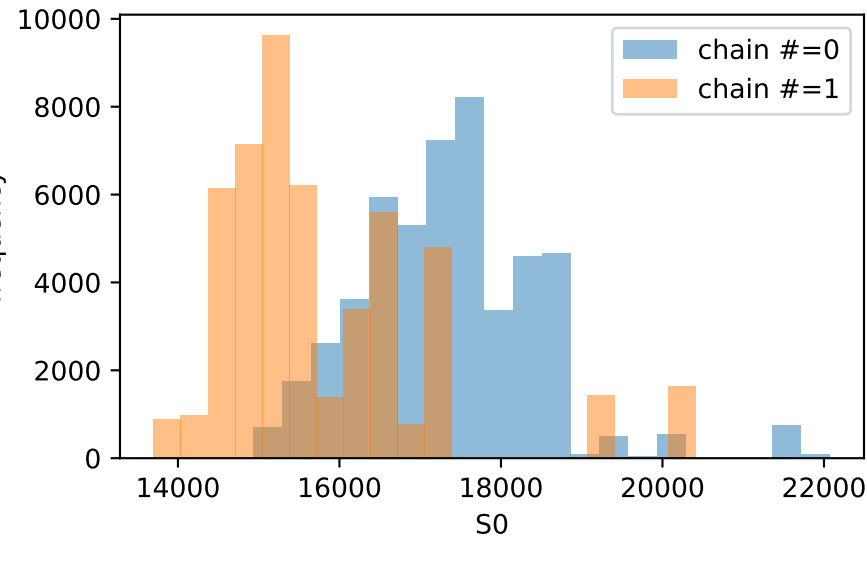
frequency
tau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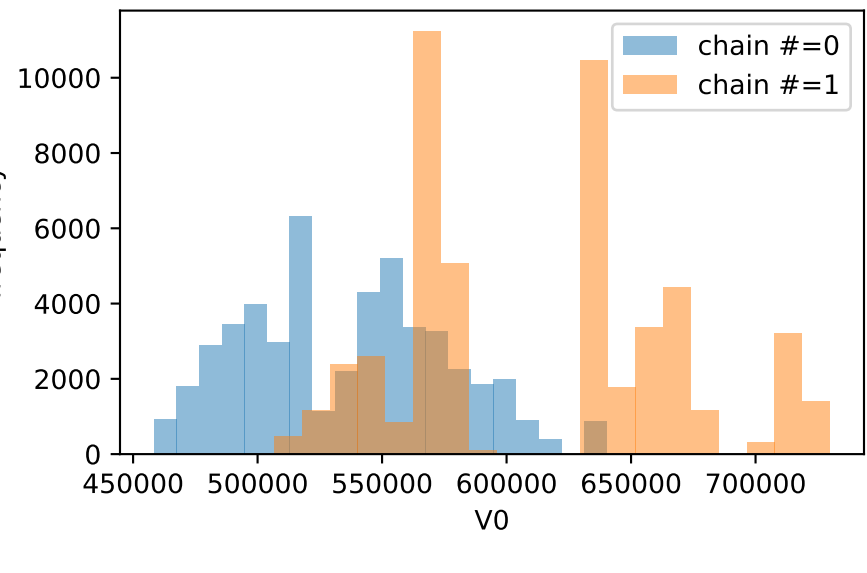
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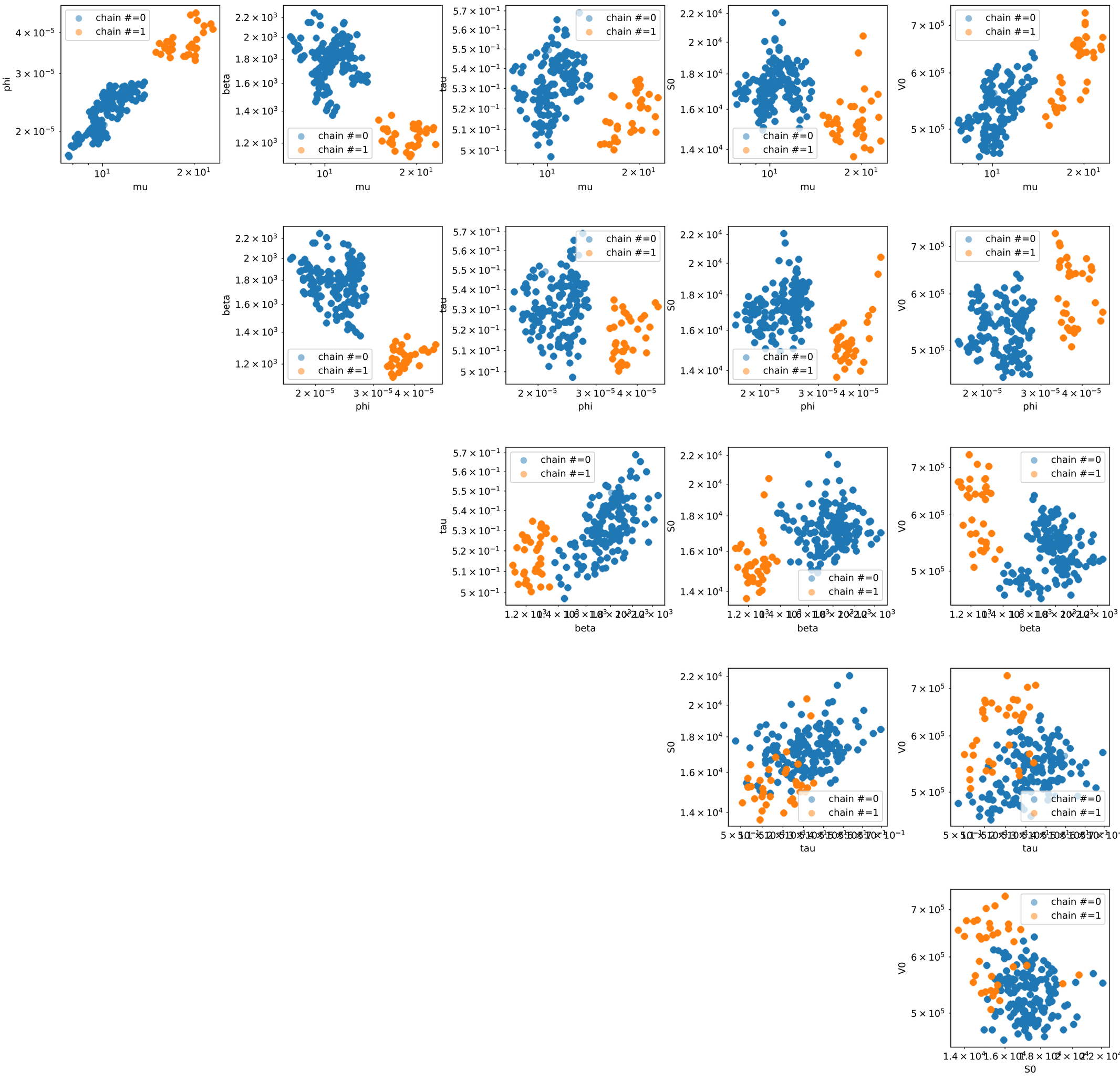
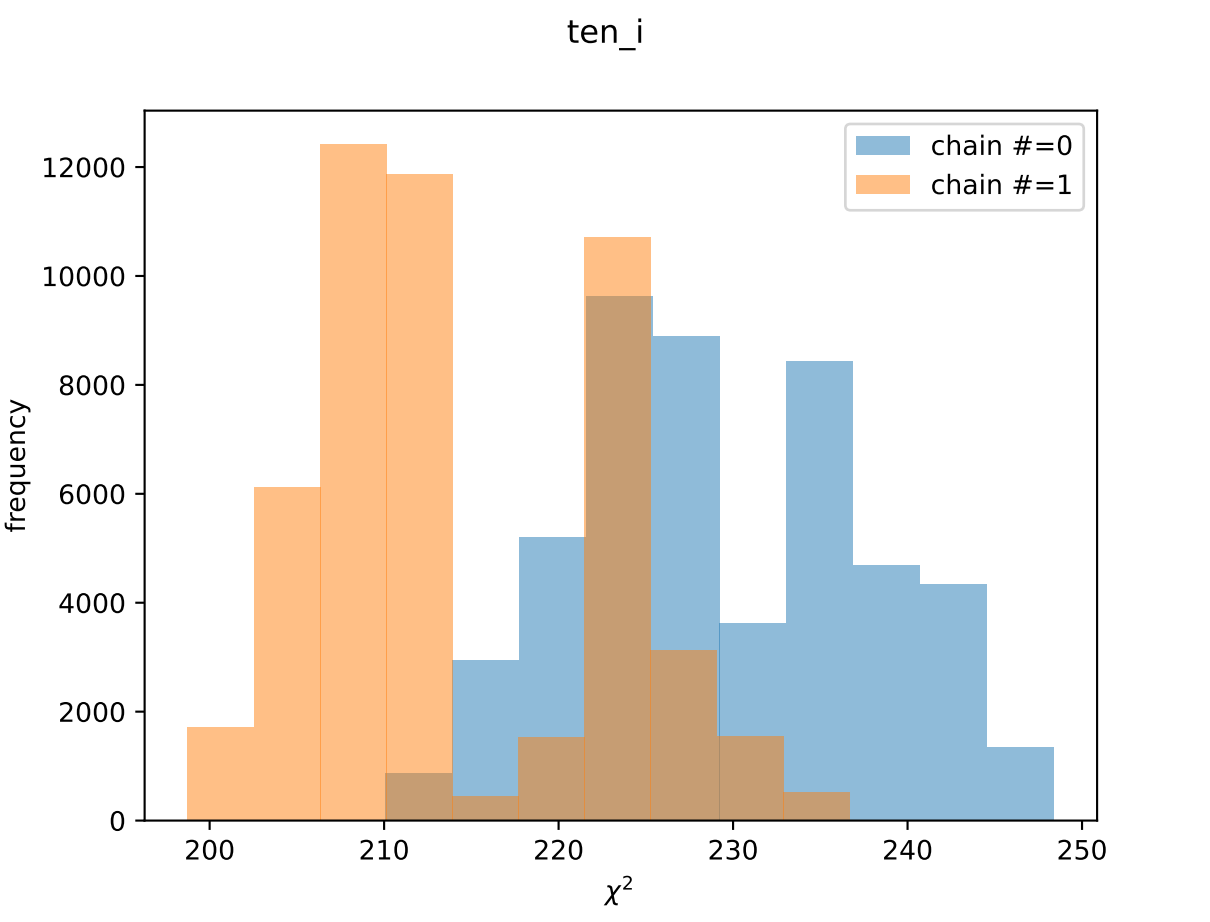
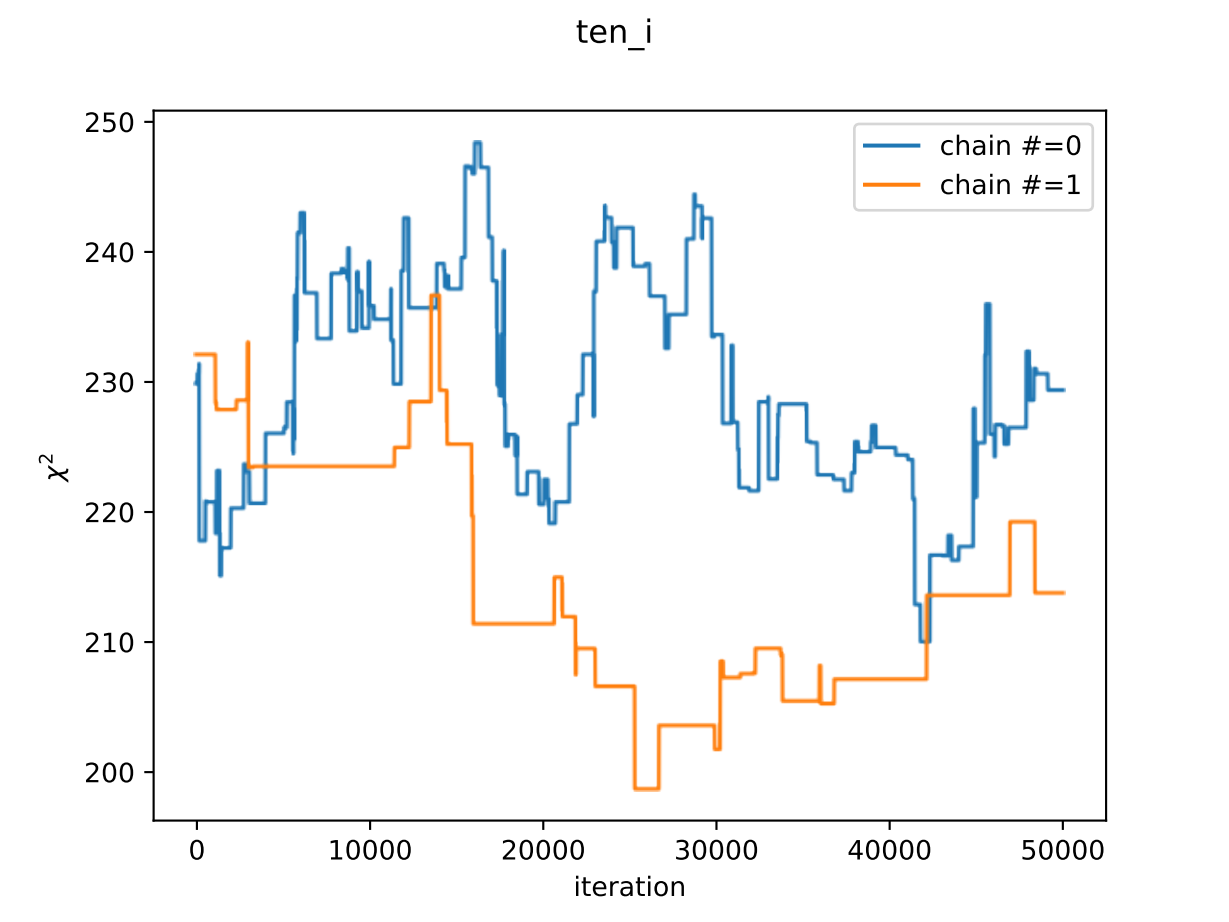
ten_i




ten_i
chain #=0
chain #=1
frequency
0
2000
4000
6000
8000
10000
12000
200
210
220
230
240
250
χ^2


ten_i
chain #=0
chain #=1
250
240
230
220
210
200
χ^2
0
10000
20000
30000
40000
50000
iteration