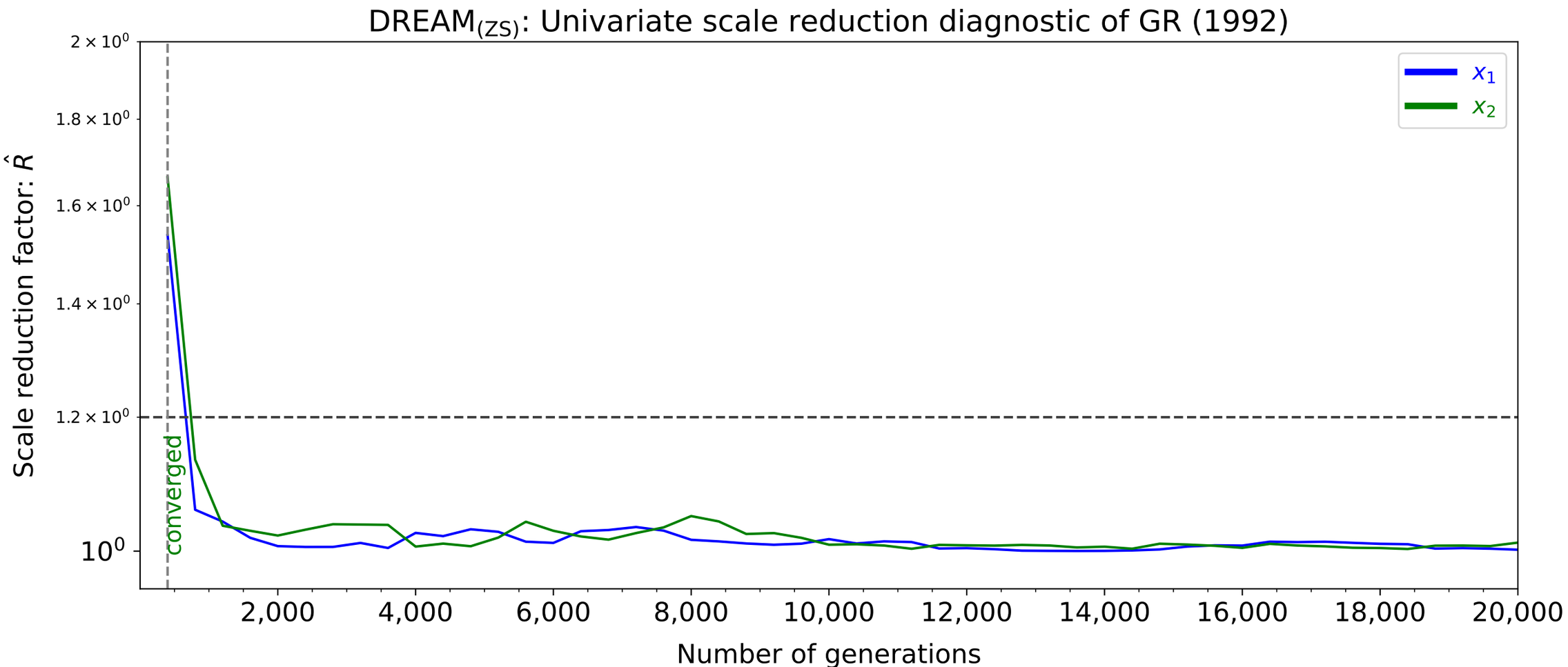
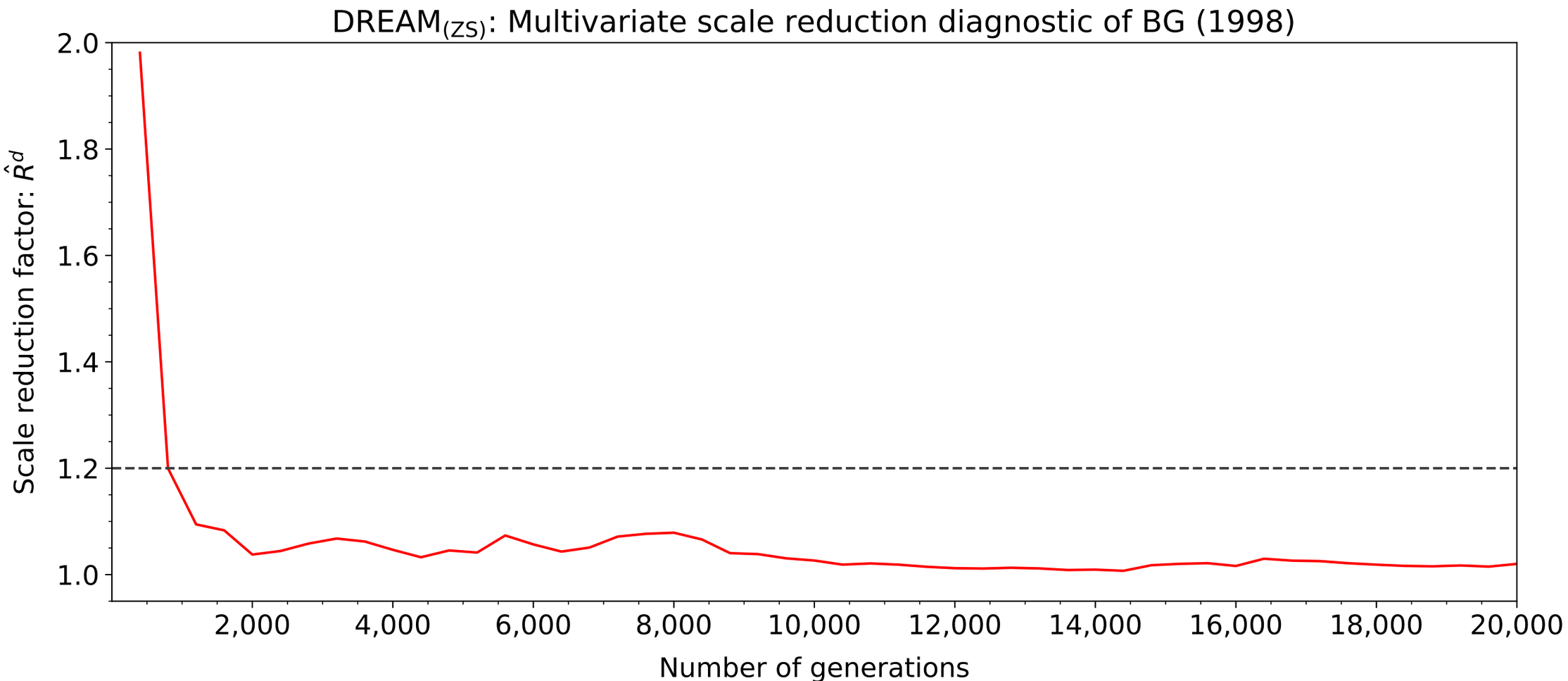
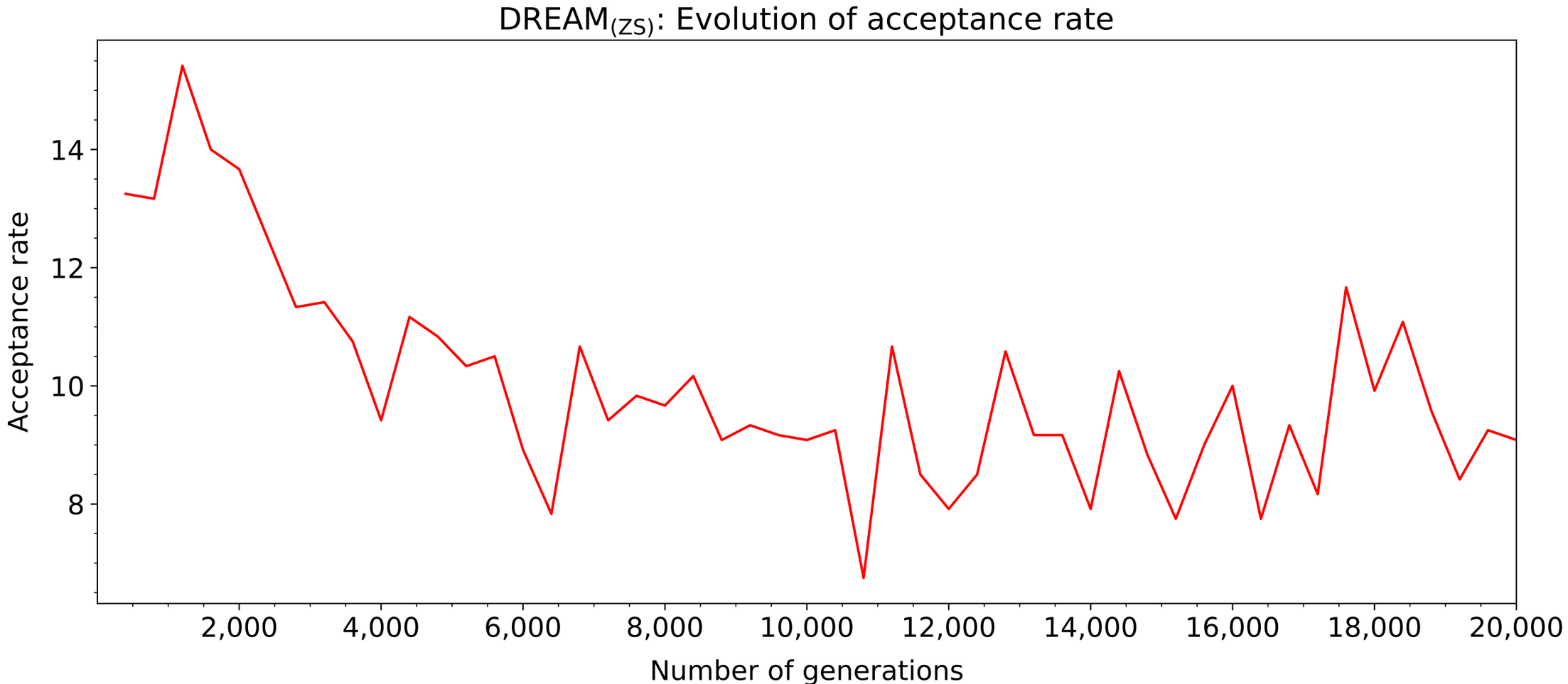
Visual results of DREAM − Suite toolbox

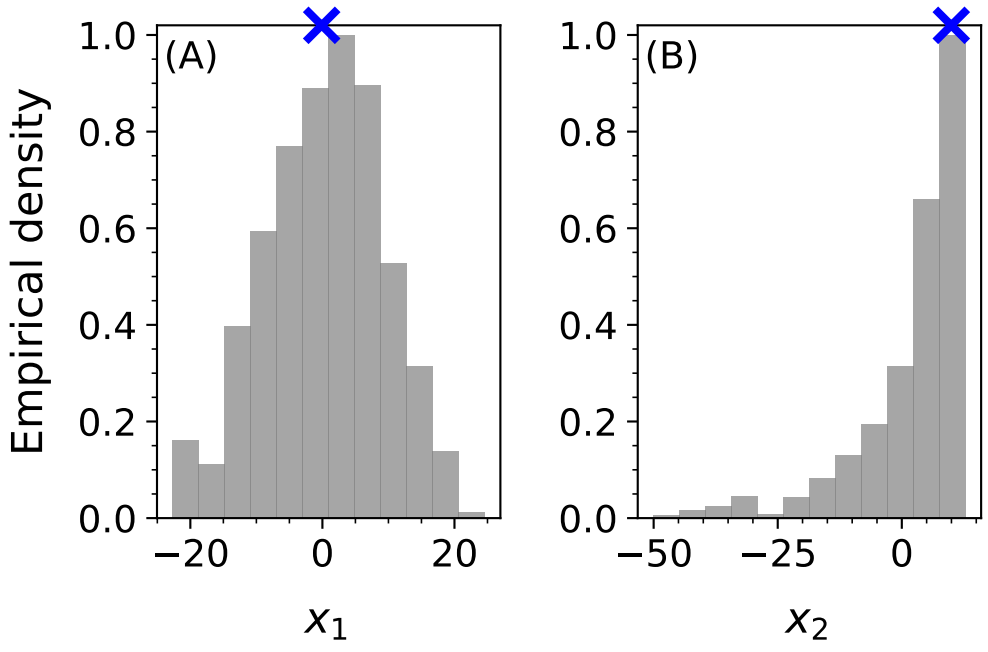
Tables are not printed to PDF file

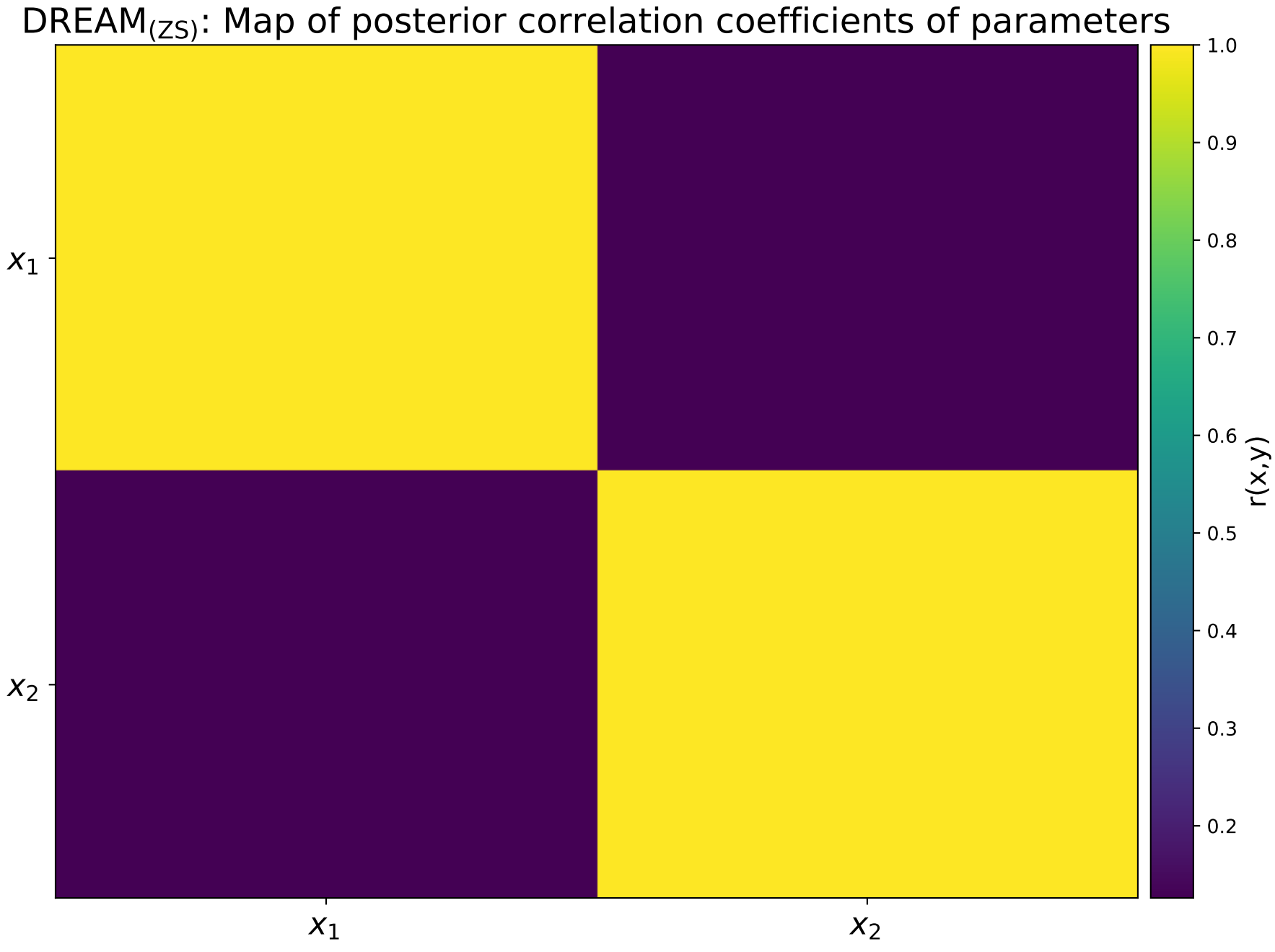

DREAM(ZS): Univariate scale reduction diagnostic of GR (1992)
Scale reduction factor: $\hat{R}$
2×10^0
1.8×10^0
1.6×10^0
1.4×10^0
1.2×10^0
10^0
converged
x_1
x_2
2,000
4,000
6,000
8,000
10,000
12,000
14,000
16,000
18,000
20,000
Number of generations


DREAM$_{(ZS)}$: Multivariate scale reduction diagnostic of BG (1998)
Scale reduction factor: $\hat{R}^d$
2.0
1.8
1.6
1.4
1.2
1.0
2,000
4,000
6,000
8,000
10,000
12,000
14,000
16,000
18,000
20,000
Number of generations

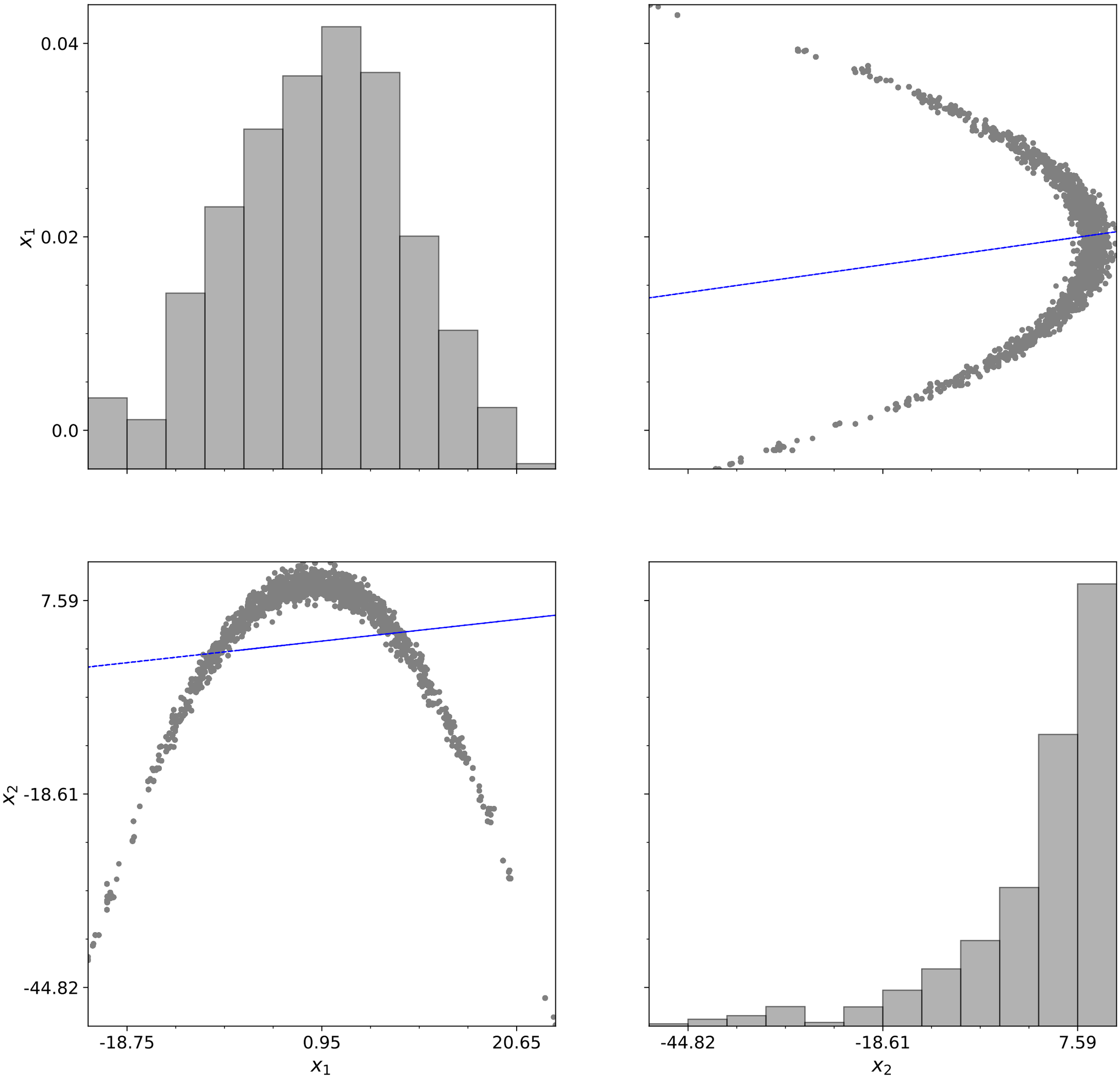

DREAM(ZS): Evolution of acceptance rate
Acceptance rate
14
12
10
8
2,000
4,000
6,000
8,000
10,000
12,000
14,000
16,000
18,000
20,000
Number of generations

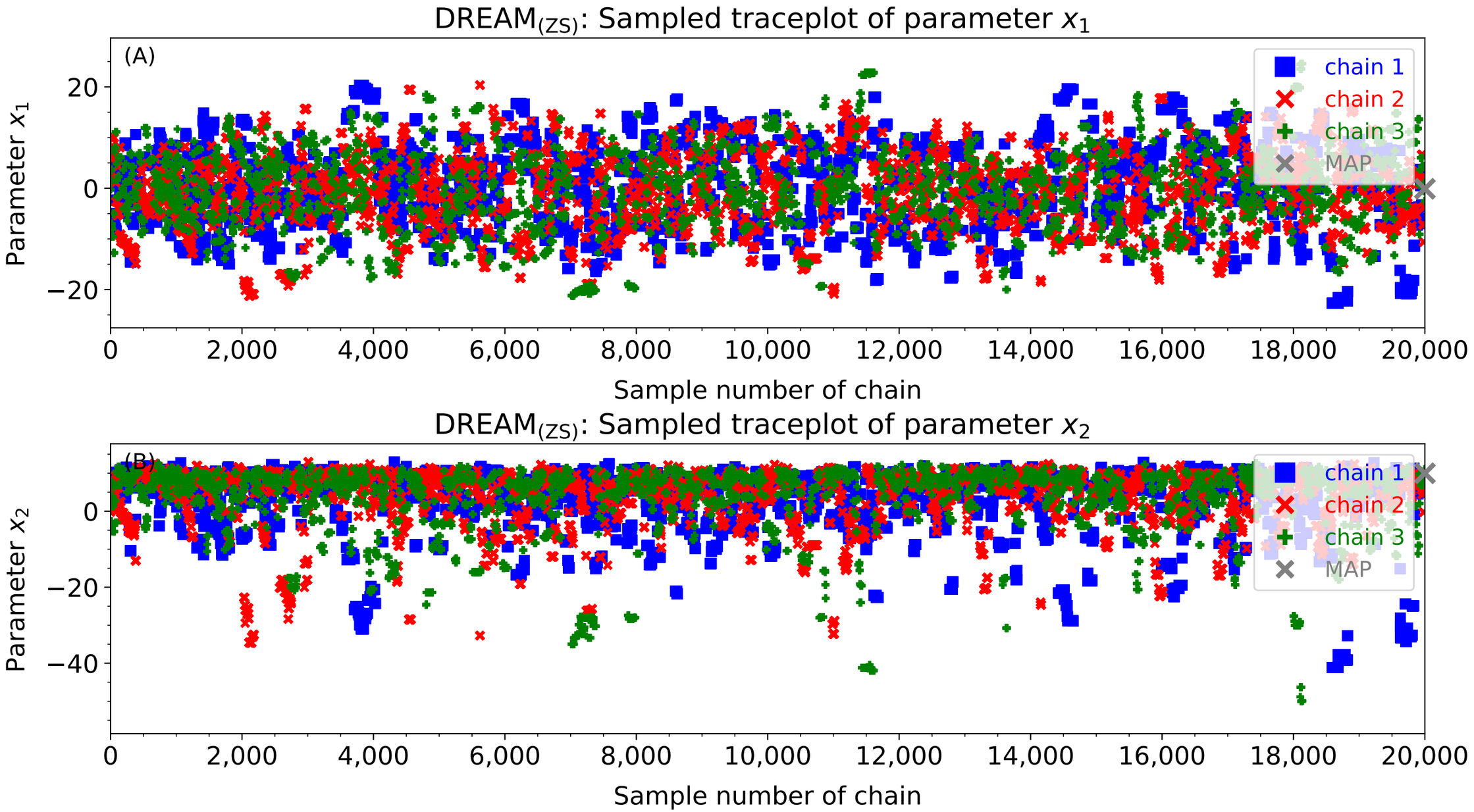
DREAM$_{(ZS)}$: Sampled marginal distribution of the parameters

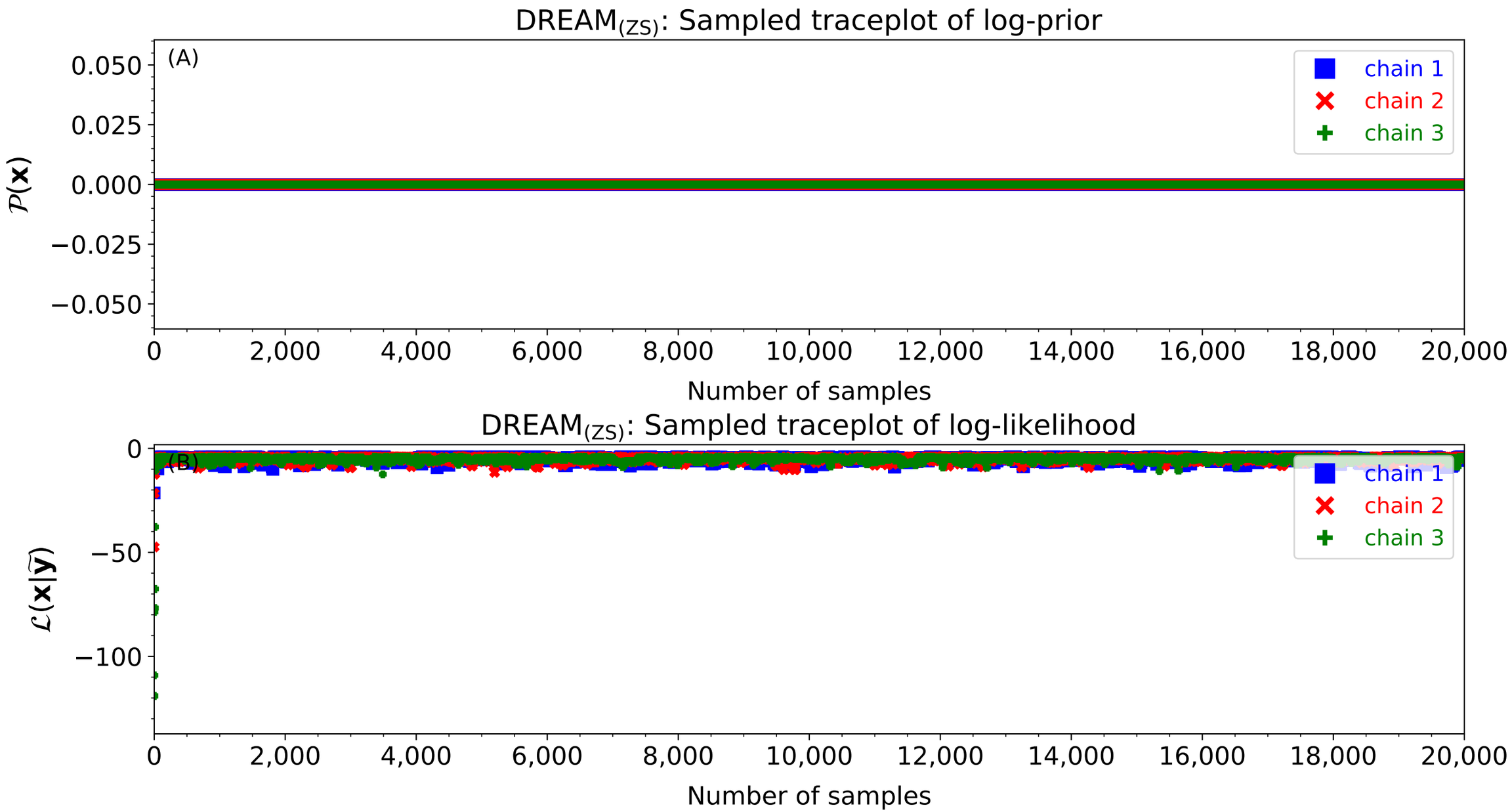


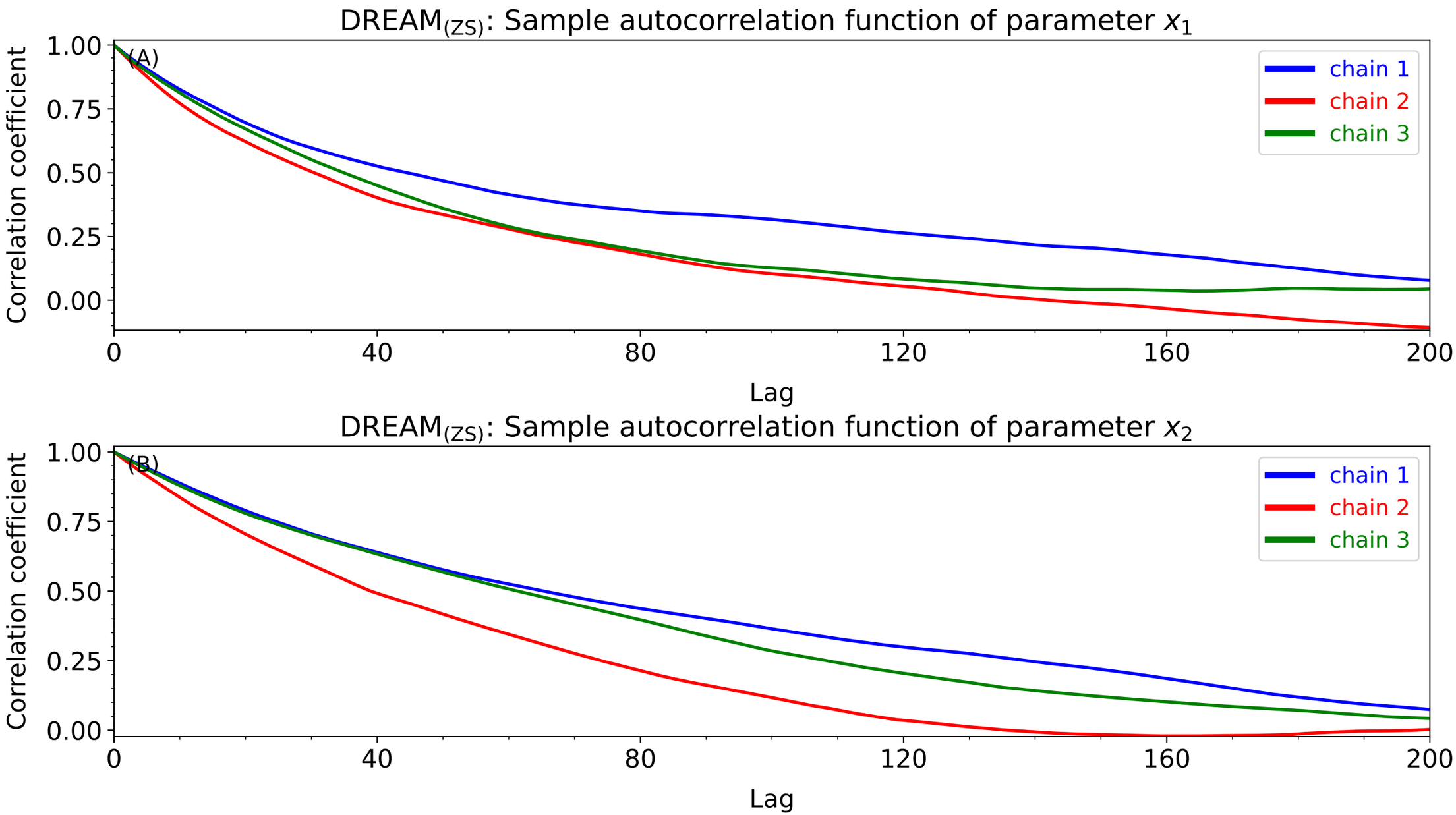

DREAM(ZS): Map of posterior correlation coefficients of parameters
x1
x2
x1
x2
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
r(x,y)

DREAM$_{(ZS)}$: Marginal distribution and bivariate scatter plots of the posterior samples




DREAM(ZS): Sampled traceplot of parameter x_1
(A)
Parameter x_1
20
0
−20
chain 1
chain 2
chain 3
MAP
0
2,000
4,000
6,000
8,000
10,000
12,000
14,000
16,000
18,000
20,000
Sample number of chain
DREAM(ZS): Sampled traceplot of parameter x_2
(B)
Parameter x_2
0
−20
−40
chain 1
chain 2
chain 3
MAP
0
2,000
4,000
6,000
8,000
10,000
12,000
14,000
16,000
18,000
20,000
Sample number of chain


DREAM(ZS): Sampled traceplot of log-prior
(A)
chain 1
chain 2
chain 3
0.050
0.025
0.000
−0.025
−0.050
$\mathcal{P}(\mathbf{x})$
0
2,000
4,000
6,000
8,000
10,000
12,000
14,000
16,000
18,000
20,000
Number of samples
DREAM(ZS): Sampled traceplot of log-likelihood
(B)
chain 1
chain 2
chain 3
0
−50
−100
$\mathcal{L}(\mathbf{x}|\tilde{\mathbf{y}})$
0
2,000
4,000
6,000
8,000
10,000
12,000
14,000
16,000
18,000
20,000
Number of samples


DREAM$_{(ZS)}$: Sample autocorrelation function of parameter x_1
(A)
Correlation coefficient
1.00
0.75
0.50
0.25
0.00
0
40
80
120
160
200
Lag
chain 1
chain 2
chain 3
DREAM$_{(ZS)}$: Sample autocorrelation function of parameter x_2
(B)
Correlation coefficient
1.00
0.75
0.50
0.25
0.00
0
40
80
120
160
200
Lag
chain 1
chain 2
chain 3