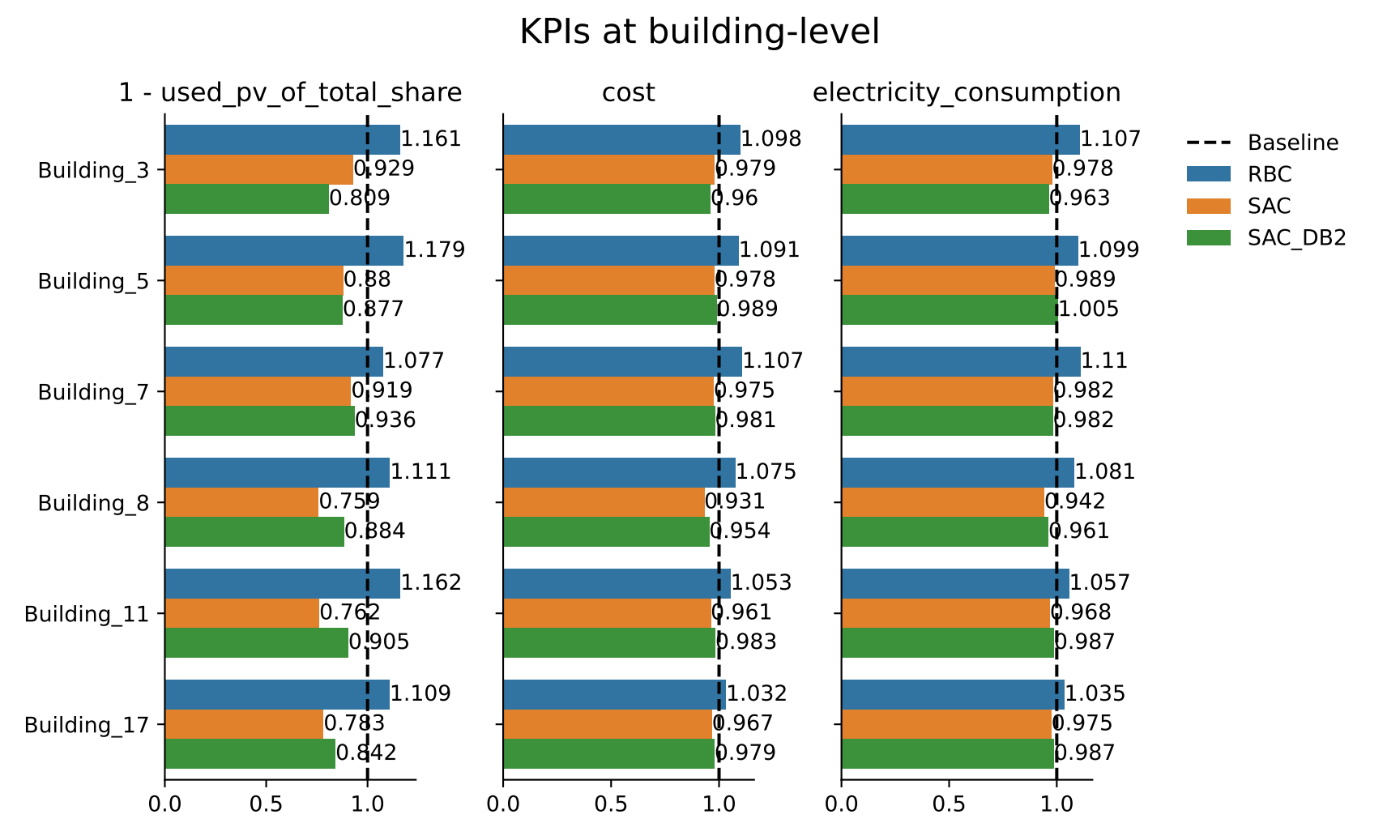
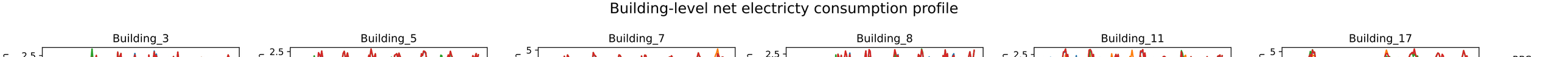
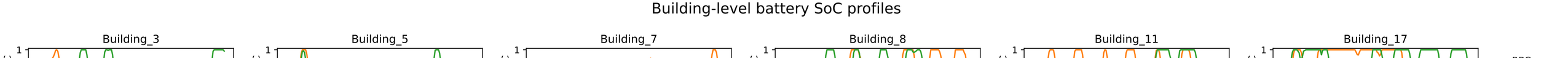
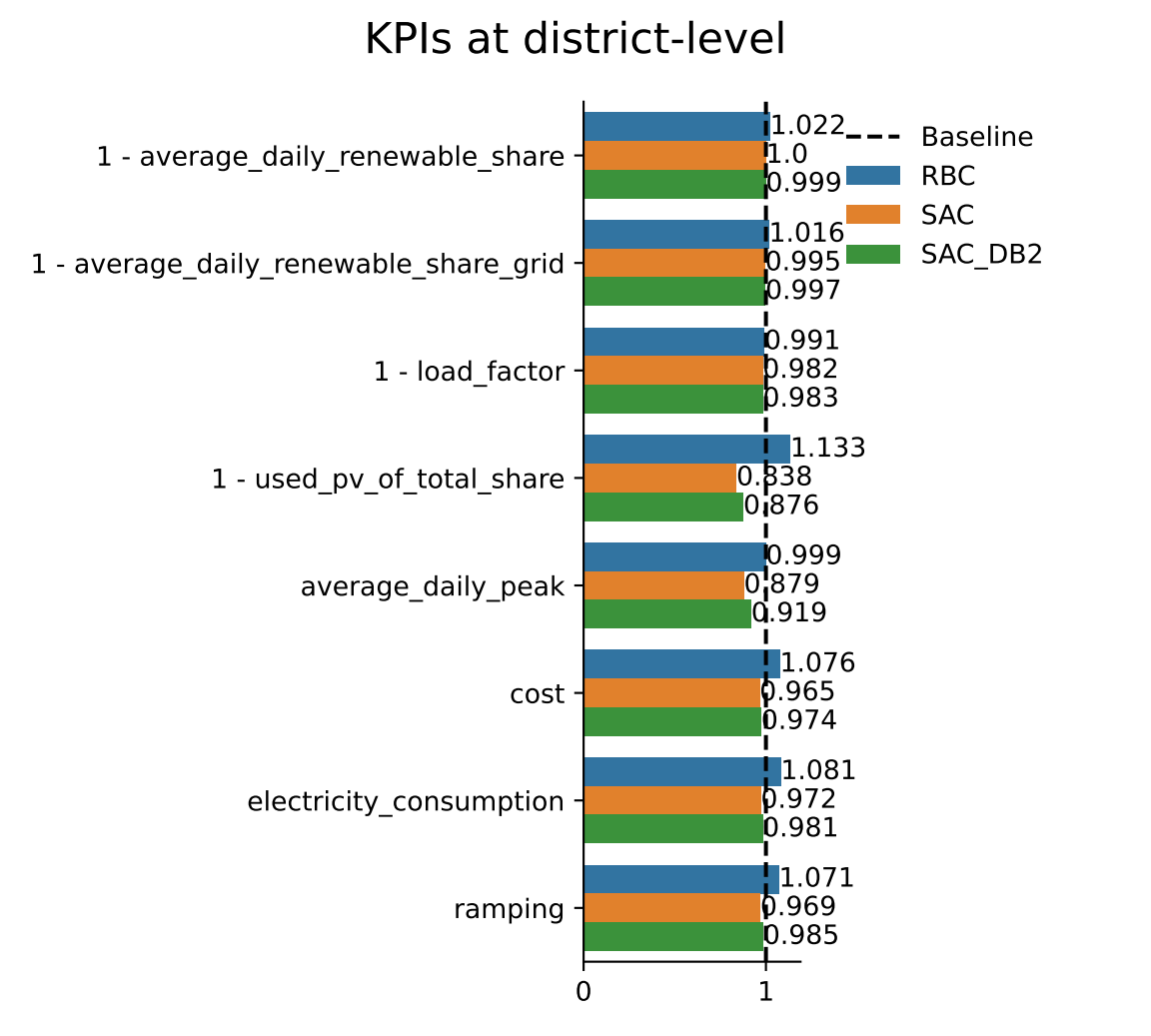
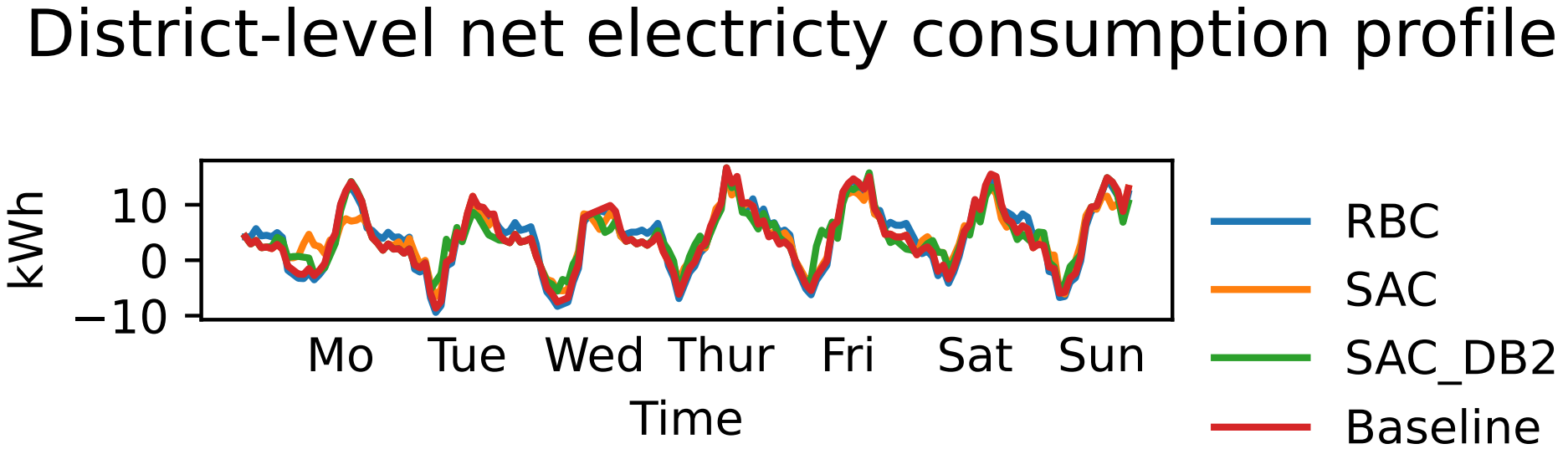
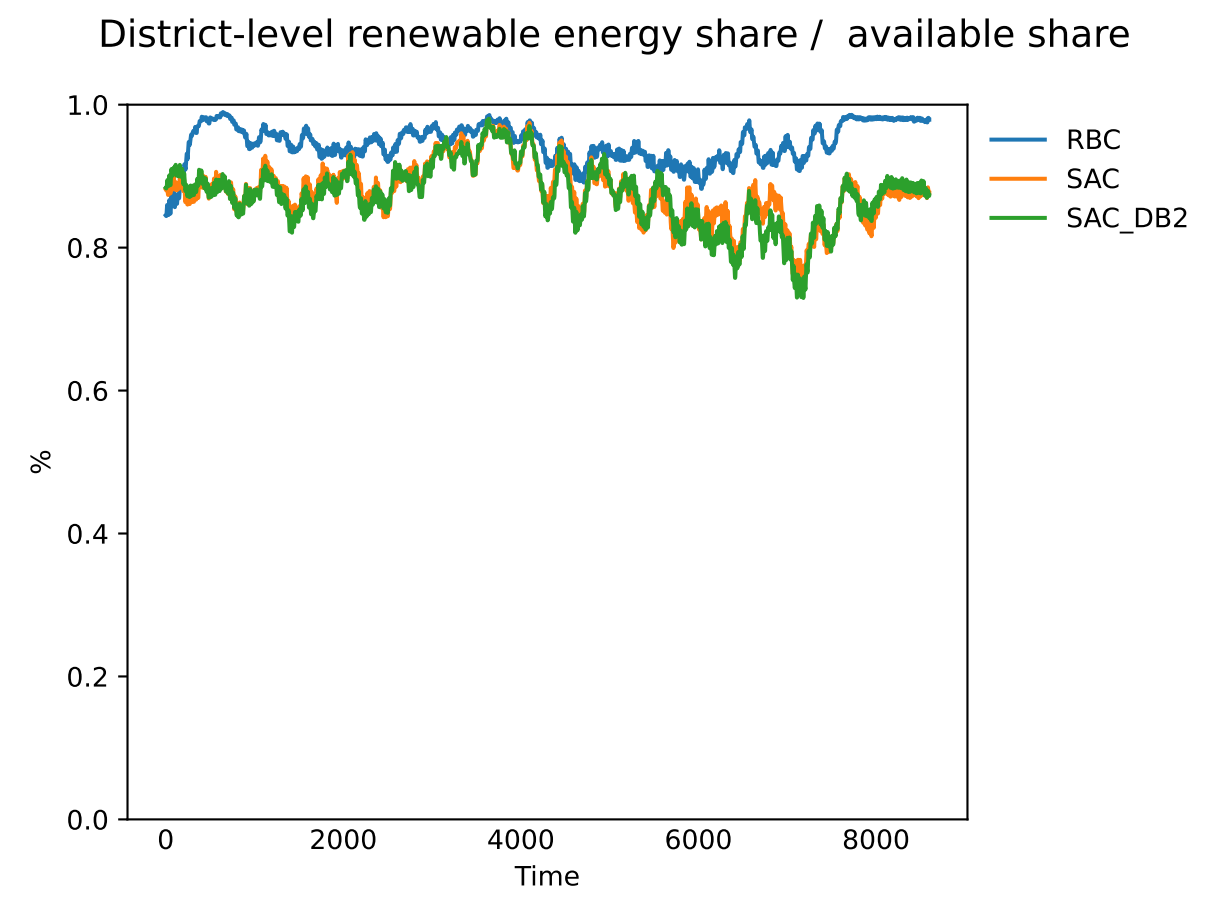

KPIs at building-level
1 - used_pv_of_total_share
cost
electricity_consumption
Building_3
Building_5
Building_7
Building_8
Building_11
Building_17
1.161
0.929
0.809
1.179
0.88
0.877
1.077
0.919
0.936
1.111
0.759
0.884
1.162
0.762
0.905
1.109
0.783
0.842
1.098
0.979
0.96
1.091
0.978
0.989
1.107
0.975
0.981
1.075
0.931
0.954
1.053
0.961
0.983
1.032
0.967
0.979
1.107
0.978
0.963
1.099
0.989
1.005
1.11
0.982
0.982
1.081
0.942
0.961
1.057
0.968
0.987
1.035
0.975
0.987
0.0
0.5
1.0
Baseline
RBC
SAC
SAC_DB2

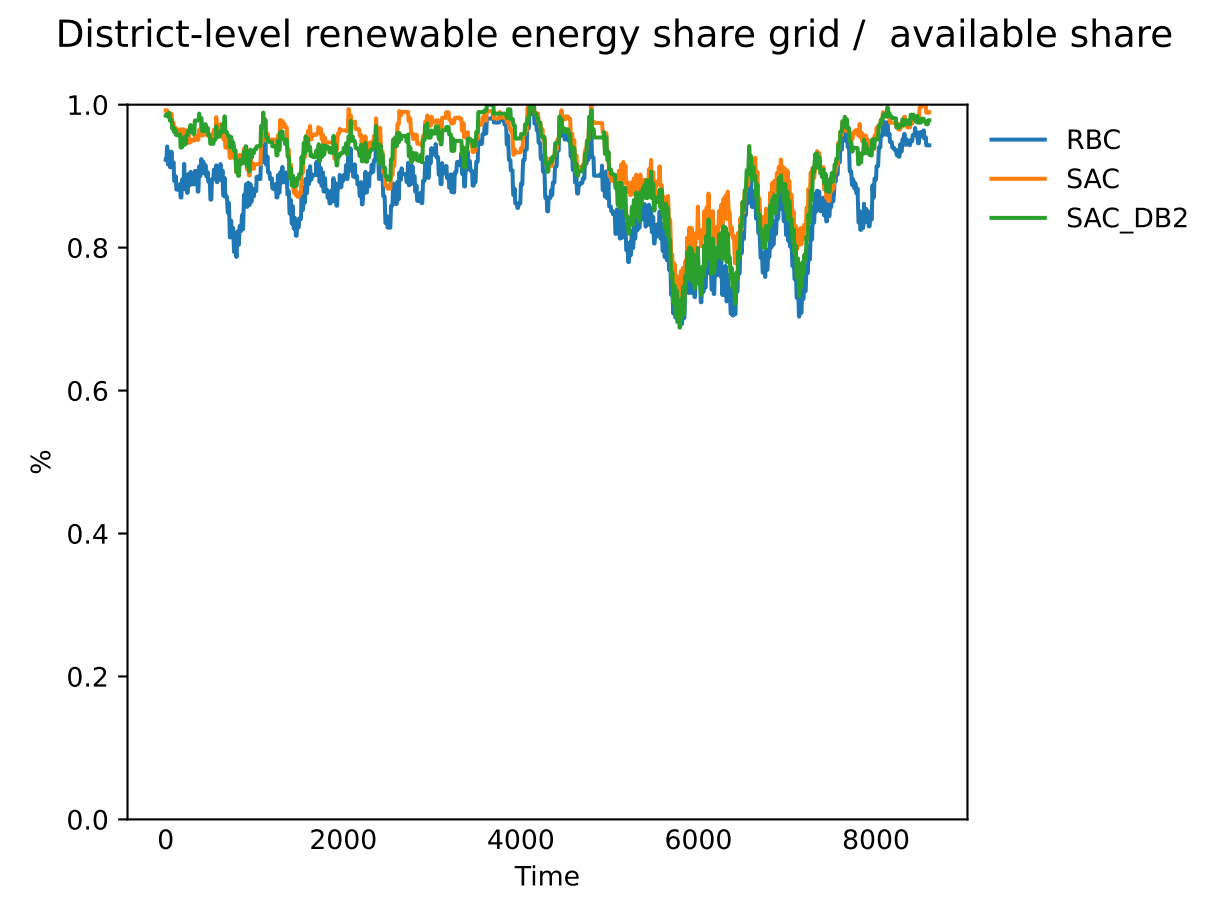

Building-level net electricty consumption profile
Building_3
Building_5
Building_7
Building_8
Building_11
Building_17
kWh
Mo Tue Wed Thur Fri Sat Sun
Time
RBC
SAC
SAC_DB2
Baseline

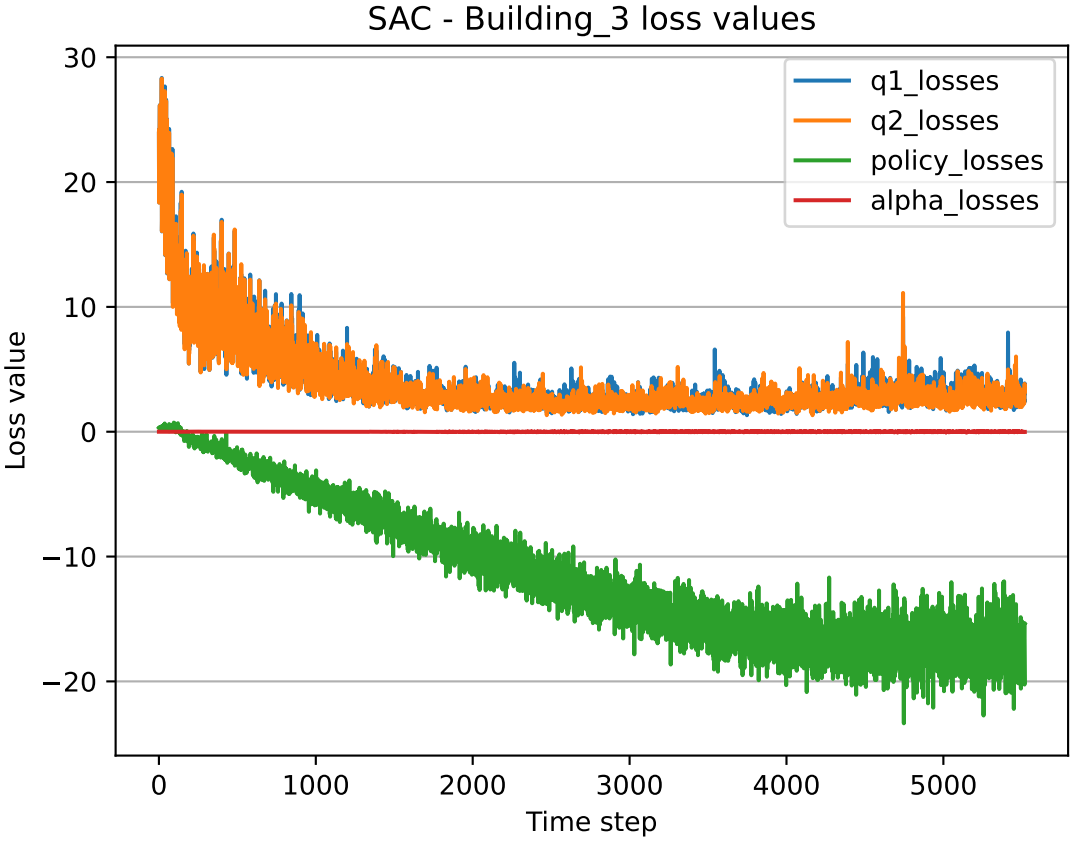

Building-level battery SoC profiles
Building_3
Building_5
Building_7
Building_8
Building_11
Building_17
SoC
1
0
Mo
Tue
Wed
Thur
Fri
Sat
Sun
Time
RBC
SAC
SAC_DB2

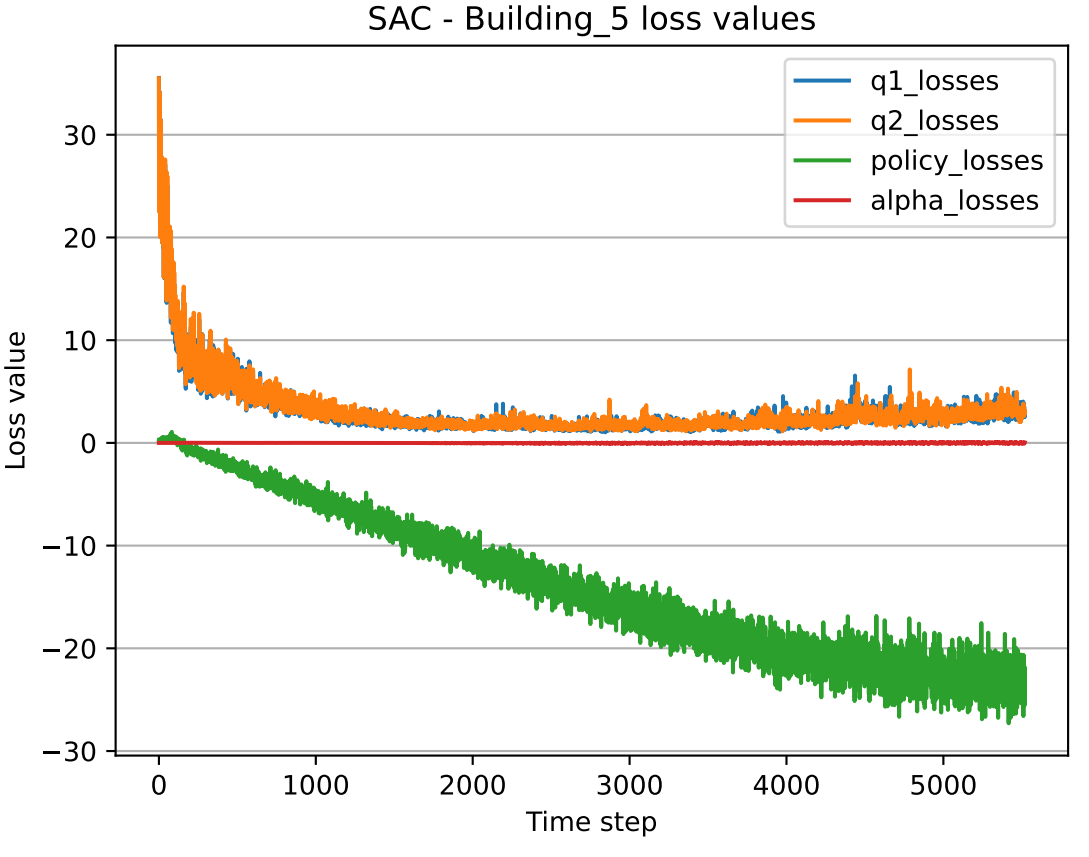

KPIs at district-level
1 - average_daily_renewable_share
1 - average_daily_renewable_share_grid
1 - load_factor
1 - used_pv_of_total_share
average_daily_peak
cost
electricity_consumption
ramping
1.022
1.0
0.999
1.016
0.995
0.997
0.991
0.982
0.983
1.133
0.838
0.876
0.999
0.879
0.919
1.076
0.965
0.974
1.081
0.972
0.981
1.071
0.969
0.985
Baseline
RBC
SAC
SAC_DB2
0
1

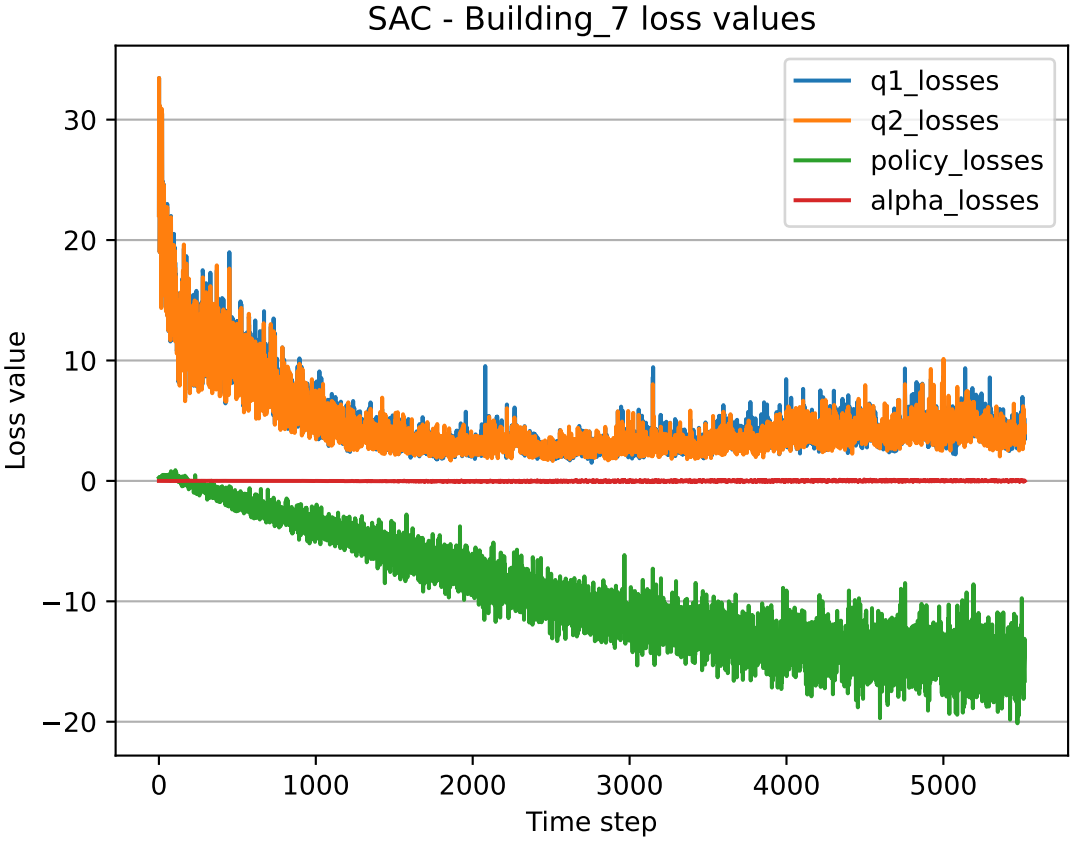

District-level net electricty consumption profile
kWh
10
0
−10
Mo
Tue
Wed
Thur
Fri
Sat
Sun
Time
RBC
SAC
SAC_DB2
Baseline

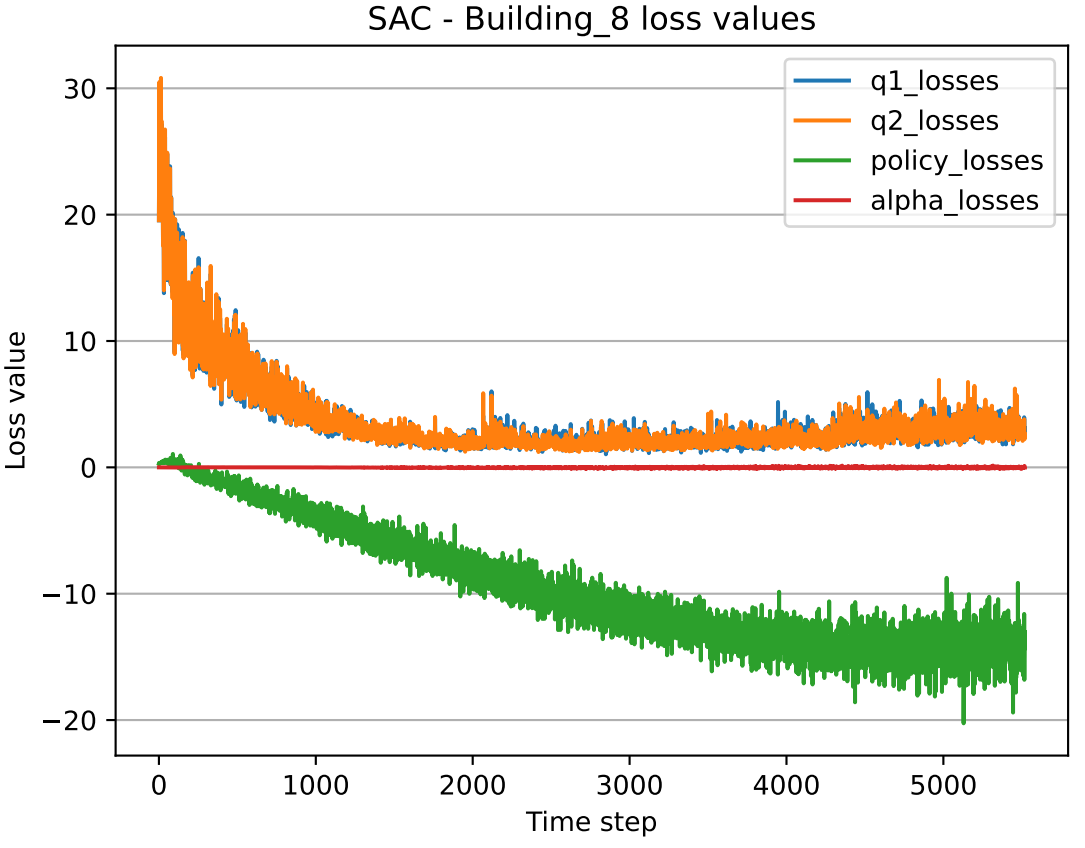

District-level renewable energy share / available share
1.0
0.8
0.6
0.4
0.2
0.0
%
0
2000
4000
6000
8000
Time
RBC
SAC
SAC_DB2

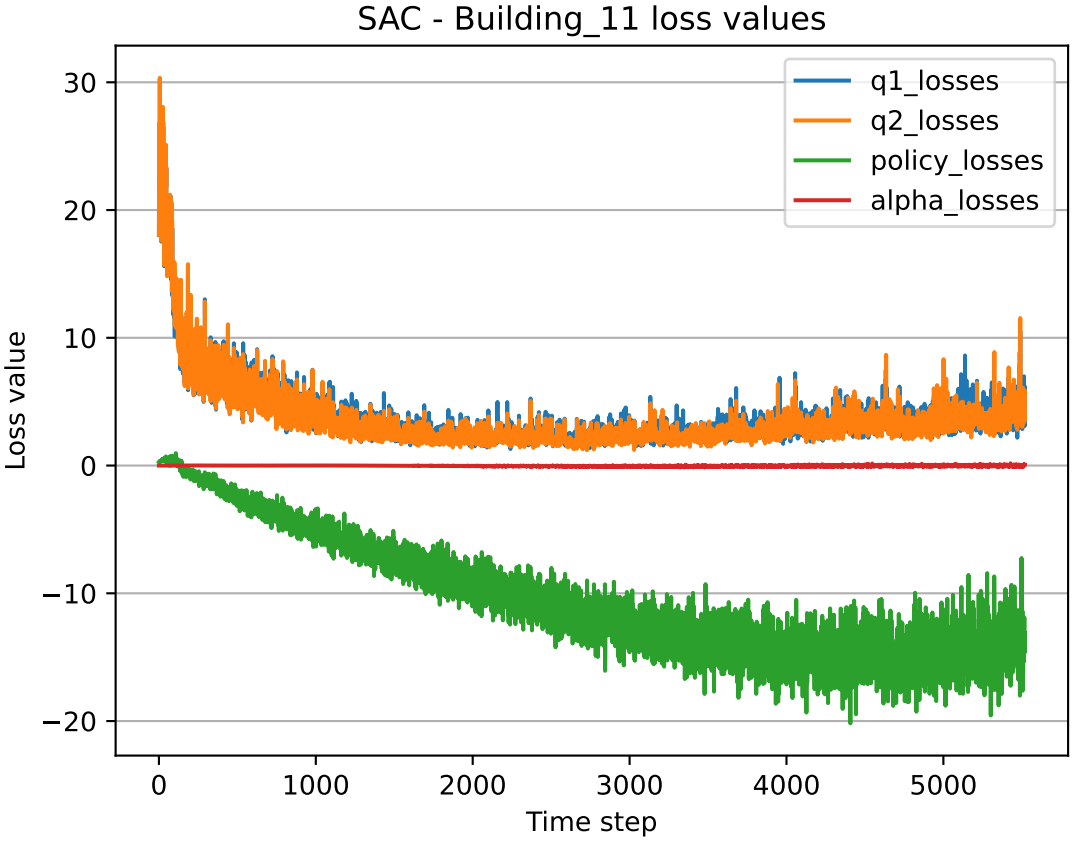

District-level renewable energy share grid / available share
1.0
0.8
0.6
0.4
0.2
0.0
%
0
2000
4000
6000
8000
Time
RBC
SAC
SAC_DB2

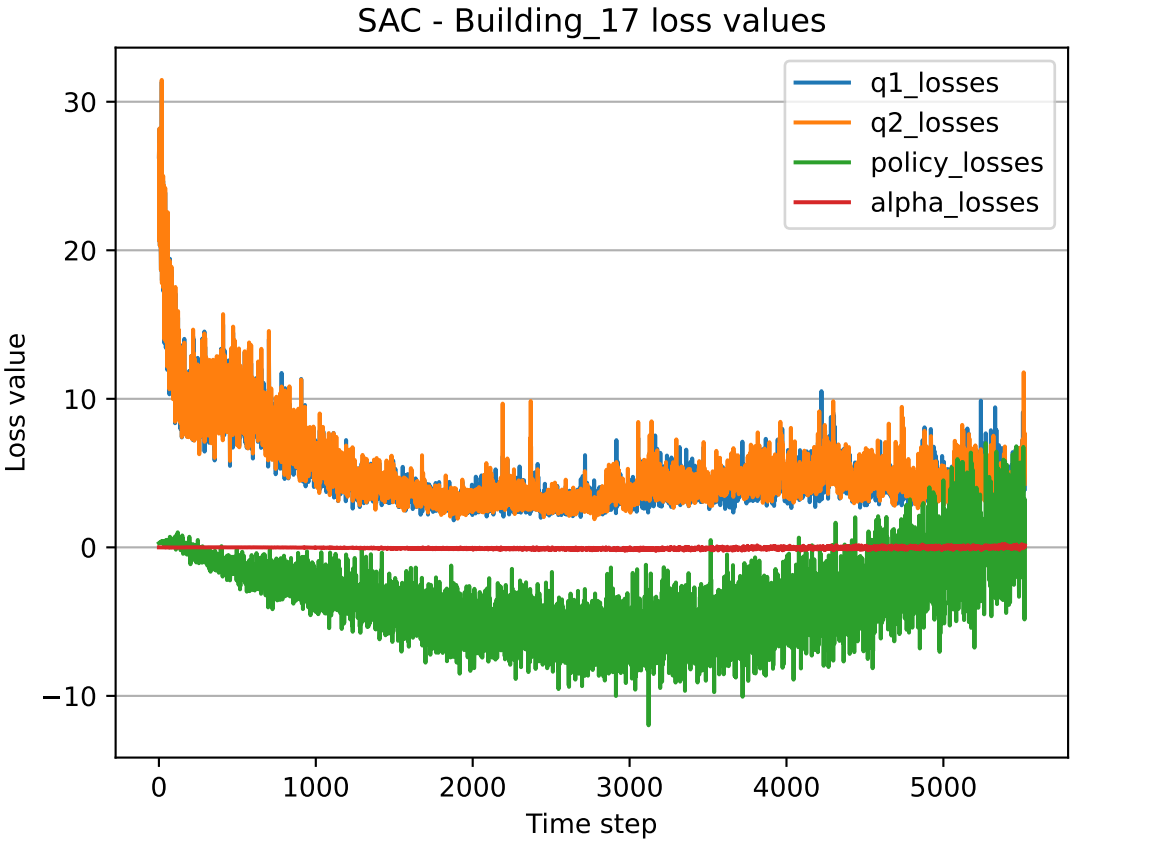

SAC - Building_3 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
Time step
30
20
10
0
−10
−20
0
1000
2000
3000
4000
5000


SAC - Building_5 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
30
20
10
0
−10
−20
−30
0
1000
2000
3000
4000
5000
Time step

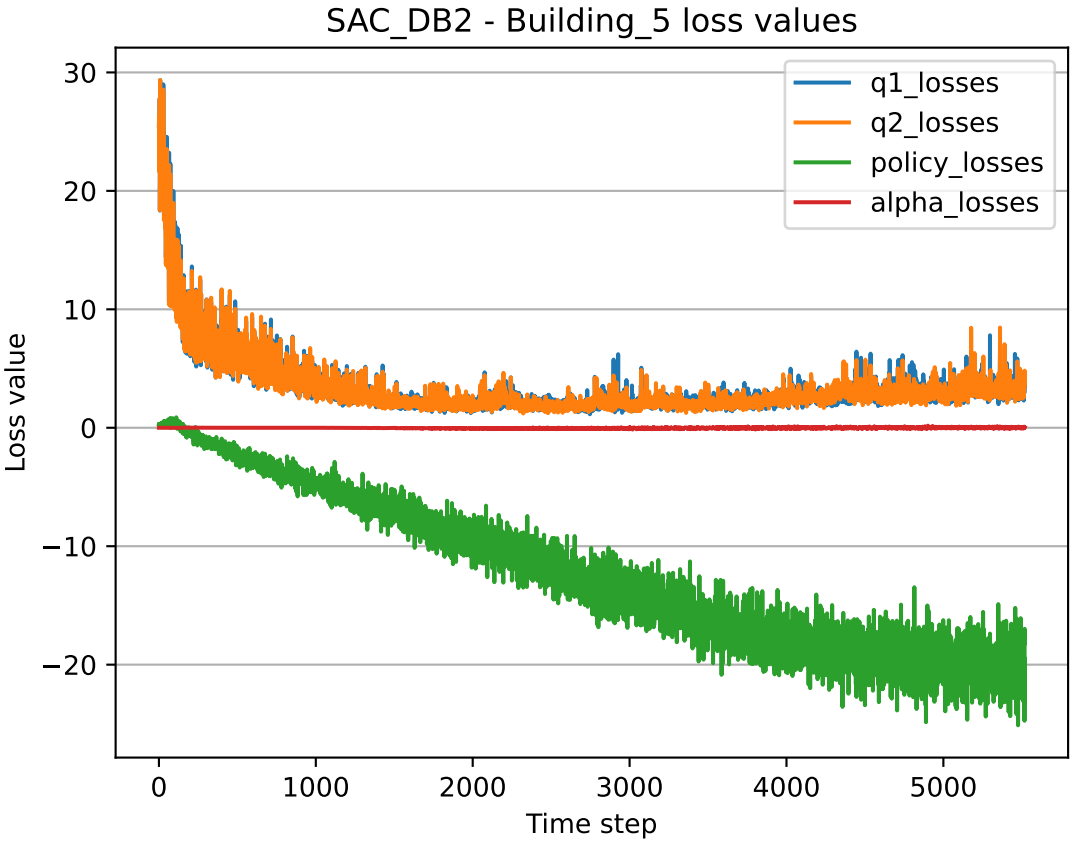

SAC - Building_7 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
30
20
10
0
−10
−20
0
1000
2000
3000
4000
5000
Time step

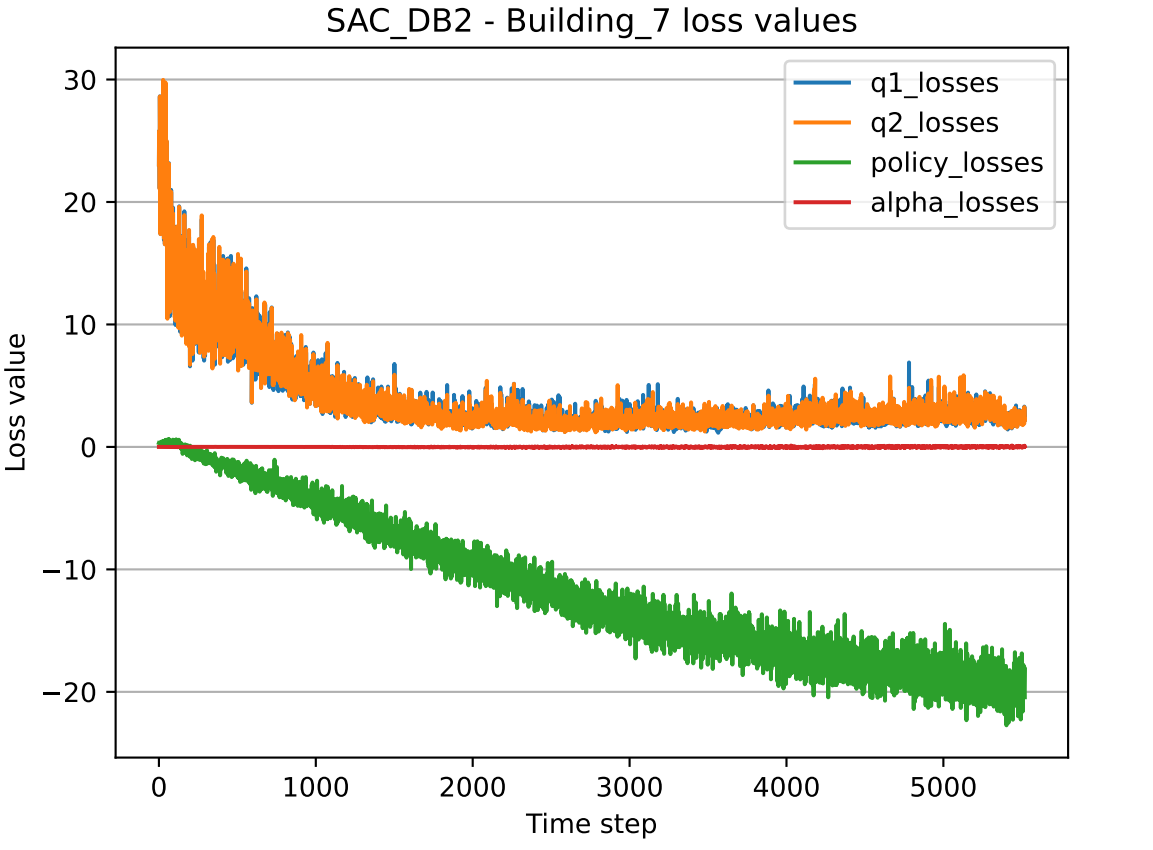

SAC - Building_8 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
30
20
10
0
−10
−20
0
1000
2000
3000
4000
5000
Time step

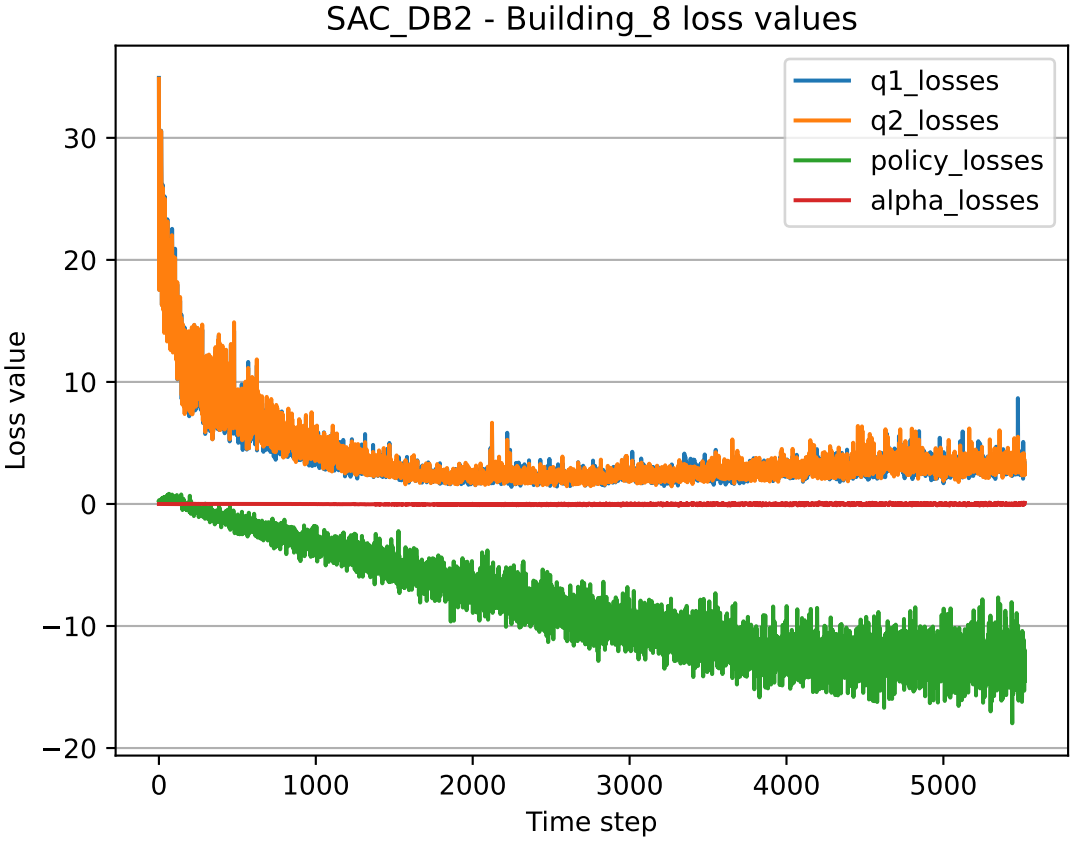

SAC - Building_11 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
30
20
10
0
−10
−20
0
1000
2000
3000
4000
5000
Time step

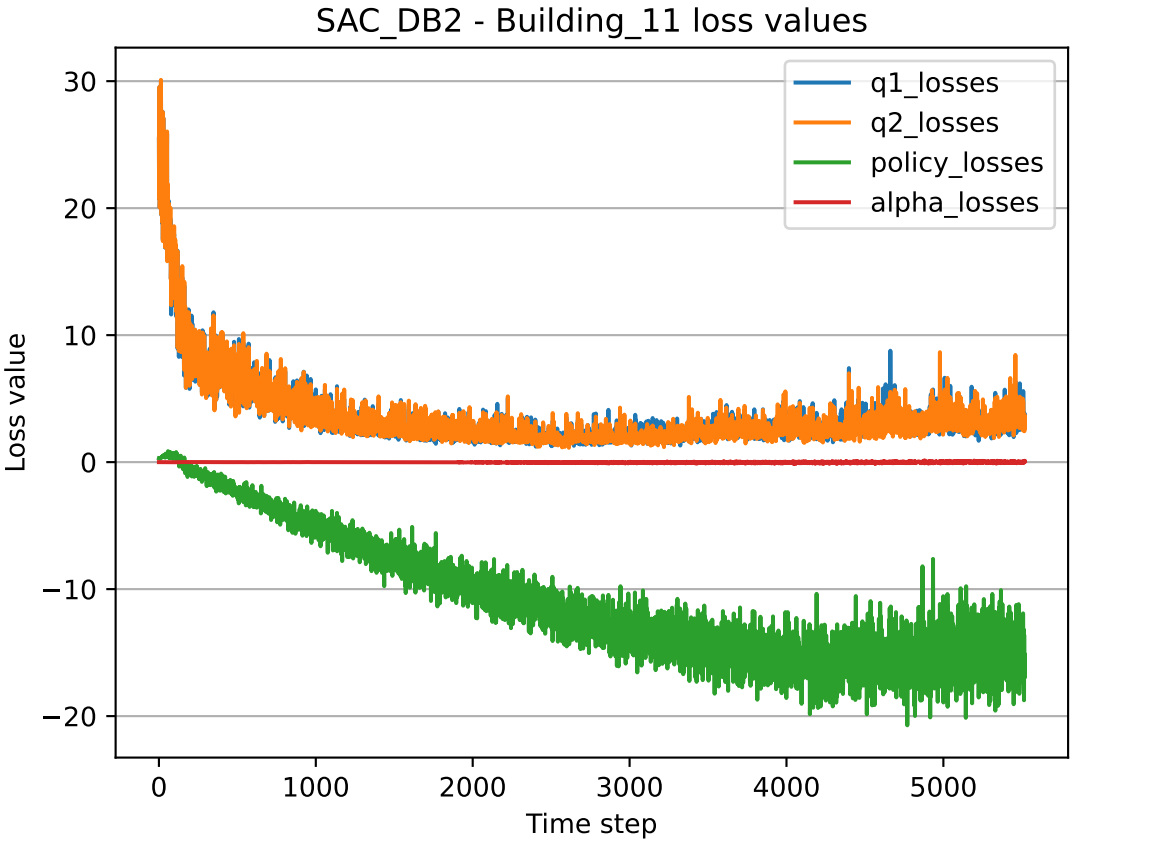

SAC - Building_17 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
30
20
10
0
−10
0
1000
2000
3000
4000
5000
Time step

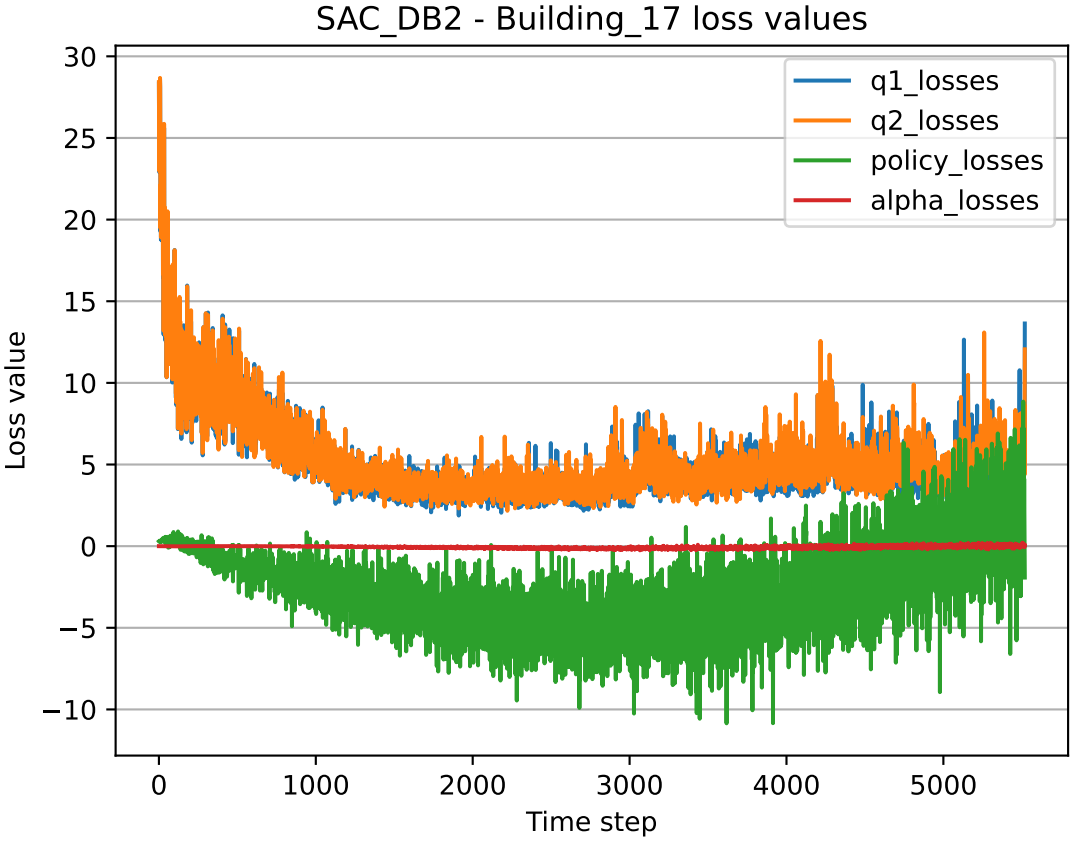
SAC_DB2 - Building_3 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
30
20
10
0
−10
−20
0
1000
2000
3000
4000
5000
Time step

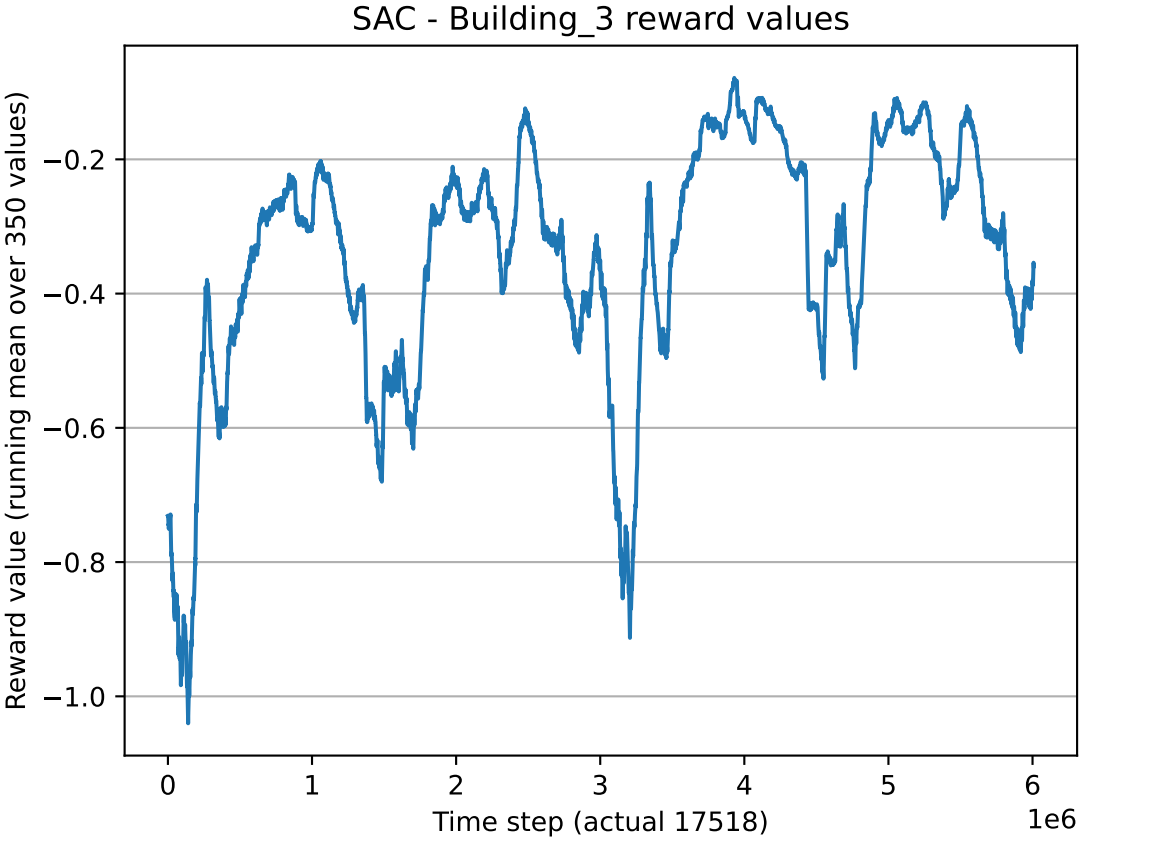

SAC_DB2 - Building_5 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
Time step
30
20
10
0
−10
−20
0
1000
2000
3000
4000
5000

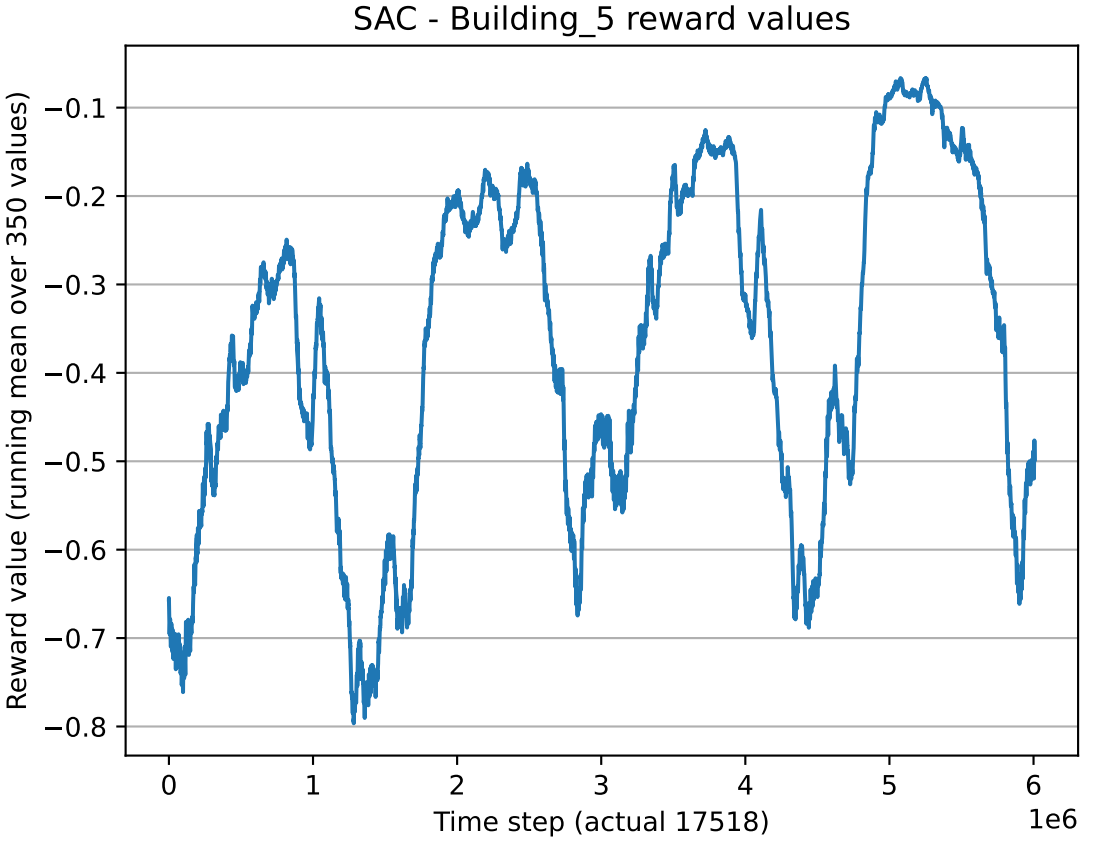

SAC_DB2 - Building_7 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
30
20
10
0
−10
−20
0
1000
2000
3000
4000
5000
Time step

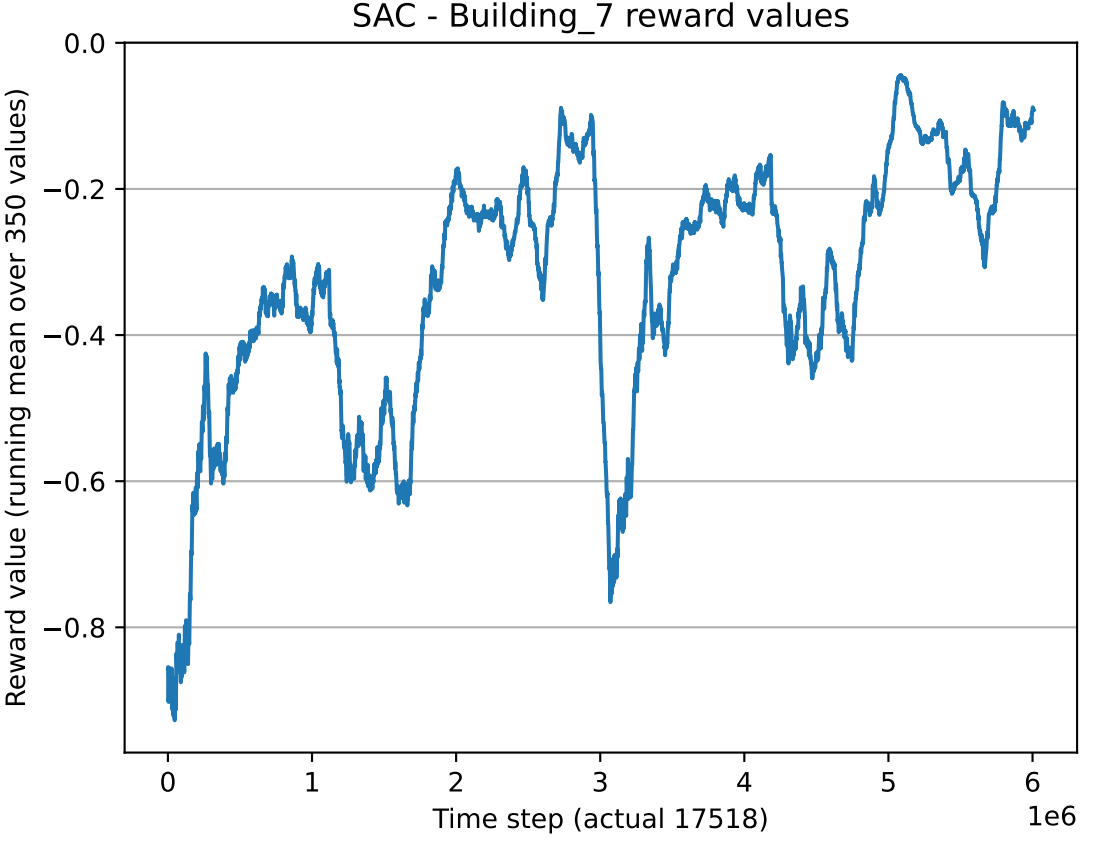

SAC_DB2 - Building_8 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
30
20
10
0
−10
−20
0
1000
2000
3000
4000
5000
Time step

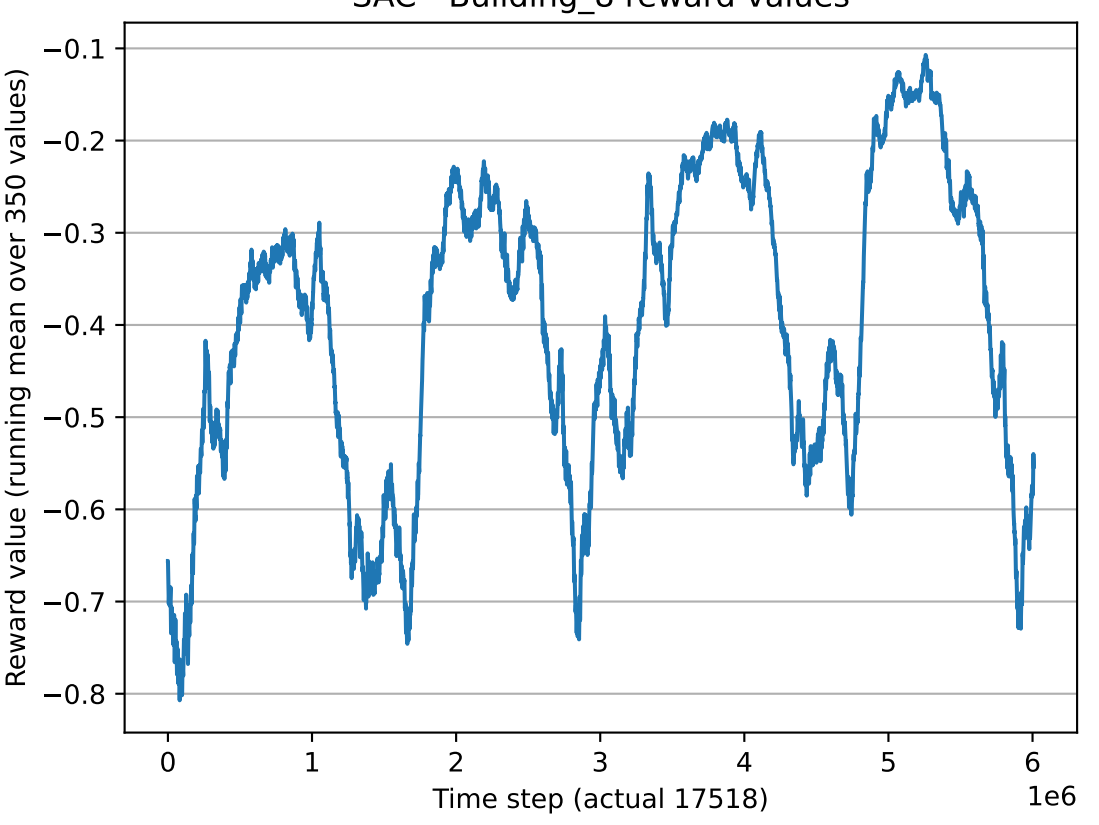

SAC_DB2 - Building_11 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
30
20
10
0
−10
−20
0
1000
2000
3000
4000
5000
Time step

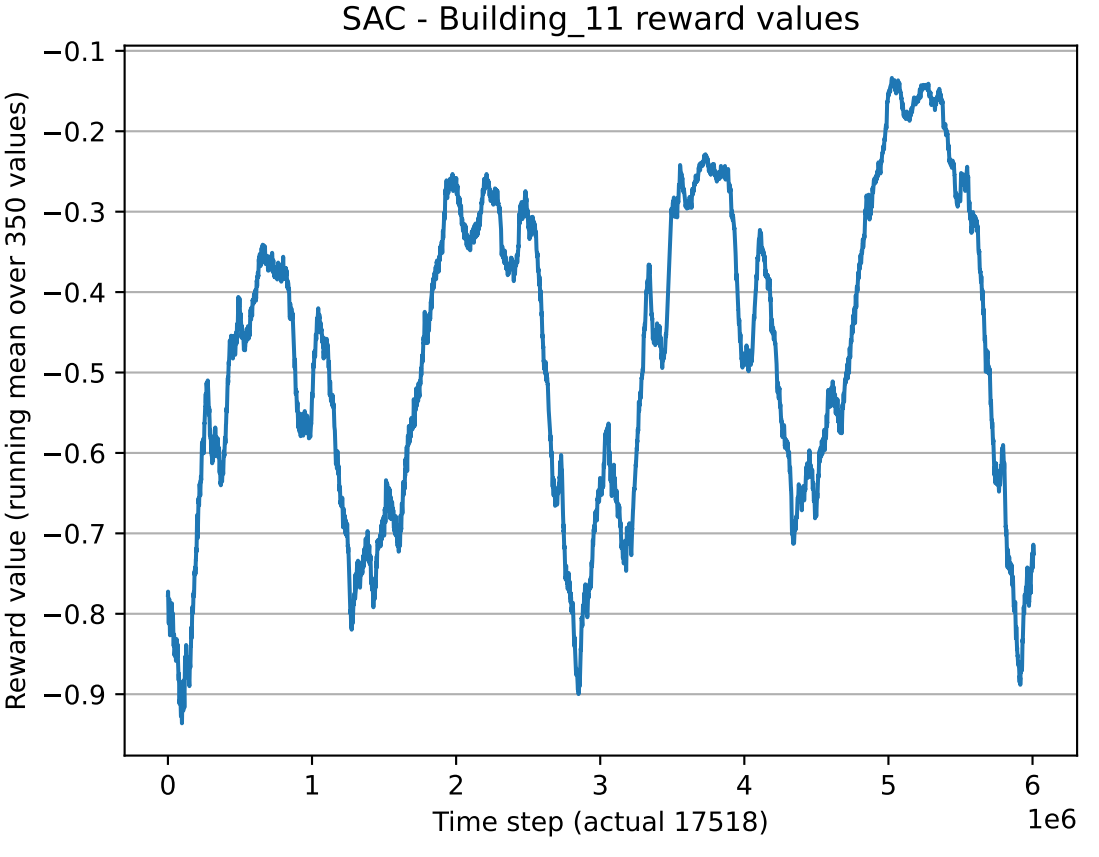

SAC_DB2 - Building_17 loss values
q1_losses
q2_losses
policy_losses
alpha_losses
Loss value
Time step
30
25
20
15
10
5
0
−5
−10
0
1000
2000
3000
4000
5000

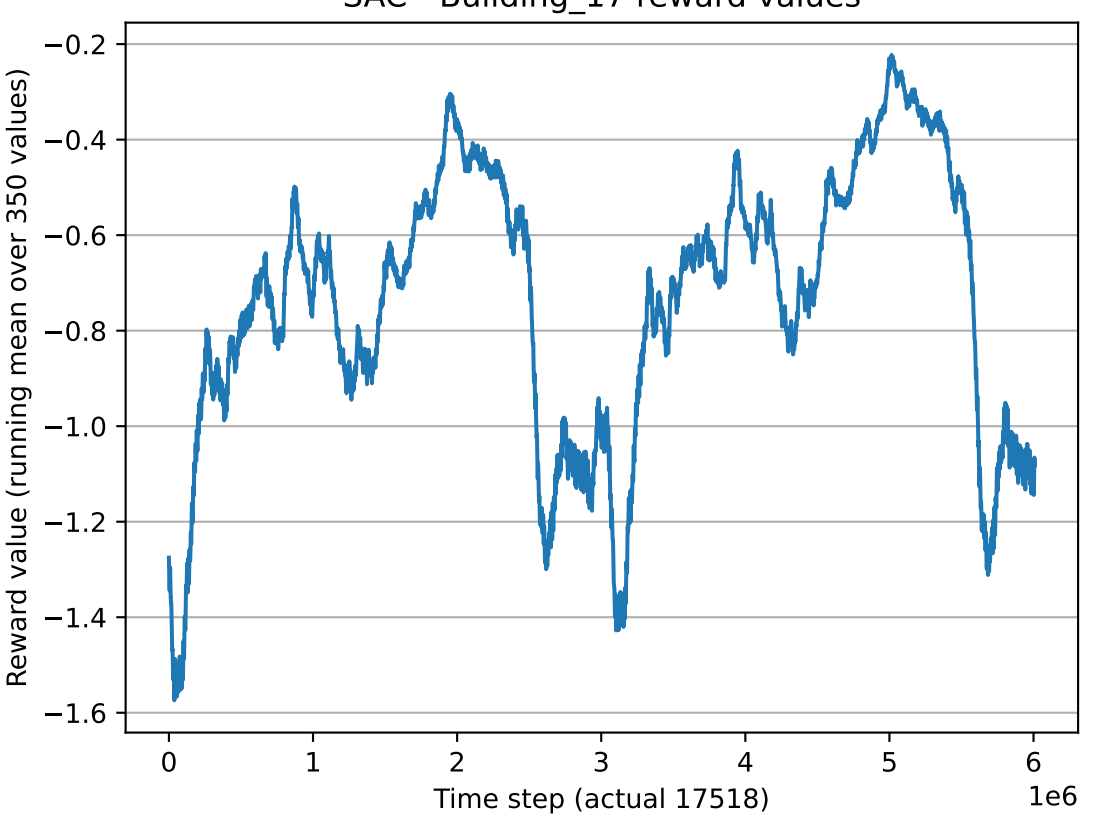

SAC - Building_3 reward values
Reward value (running mean over 350 values)
−0.2
−0.4
−0.6
−0.8
−1.0
0
1
2
3
4
5
6
Time step (actual 17518)
1e6

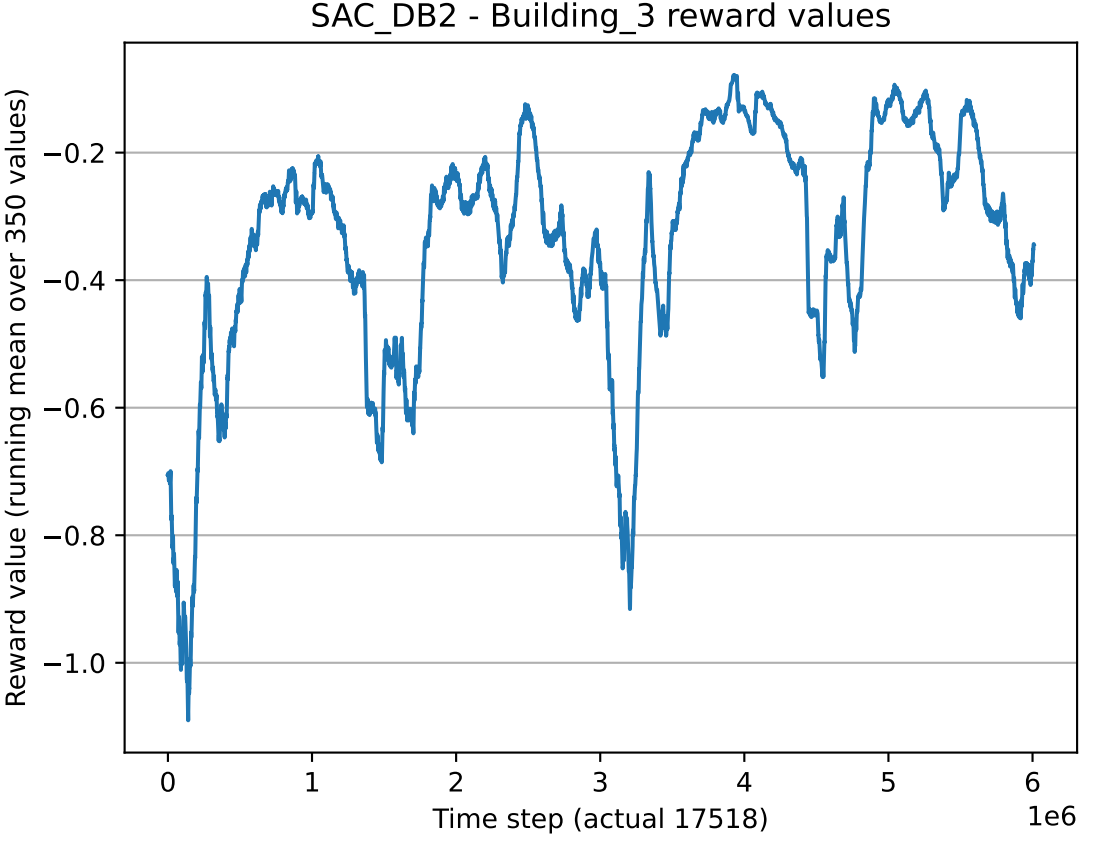

SAC - Building_5 reward values
Reward value (running mean over 350 values)
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
1
2
3
4
5
6
Time step (actual 17518)
1e6

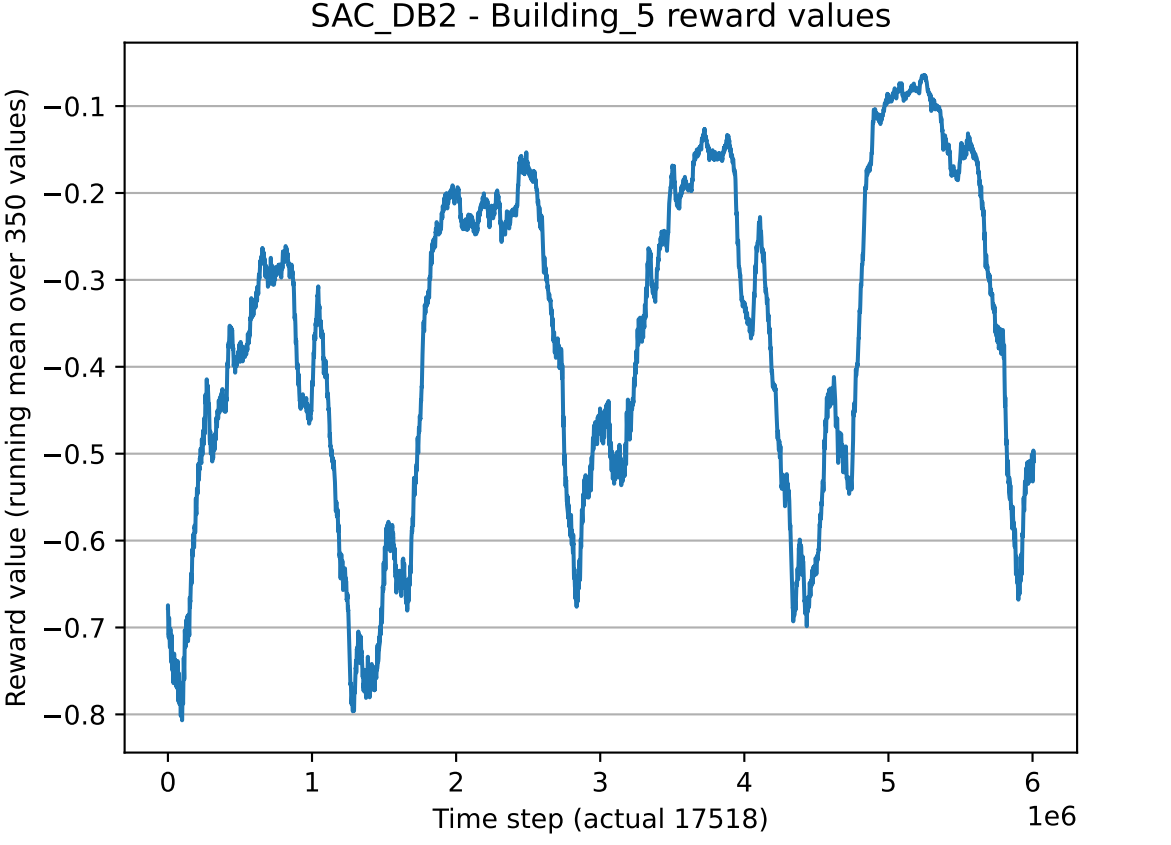

SAC - Building_7 reward values
Reward value (running mean over 350 values)
0.0
−0.2
−0.4
−0.6
−0.8
0
1
2
3
4
5
6
Time step (actual 17518)
1e6

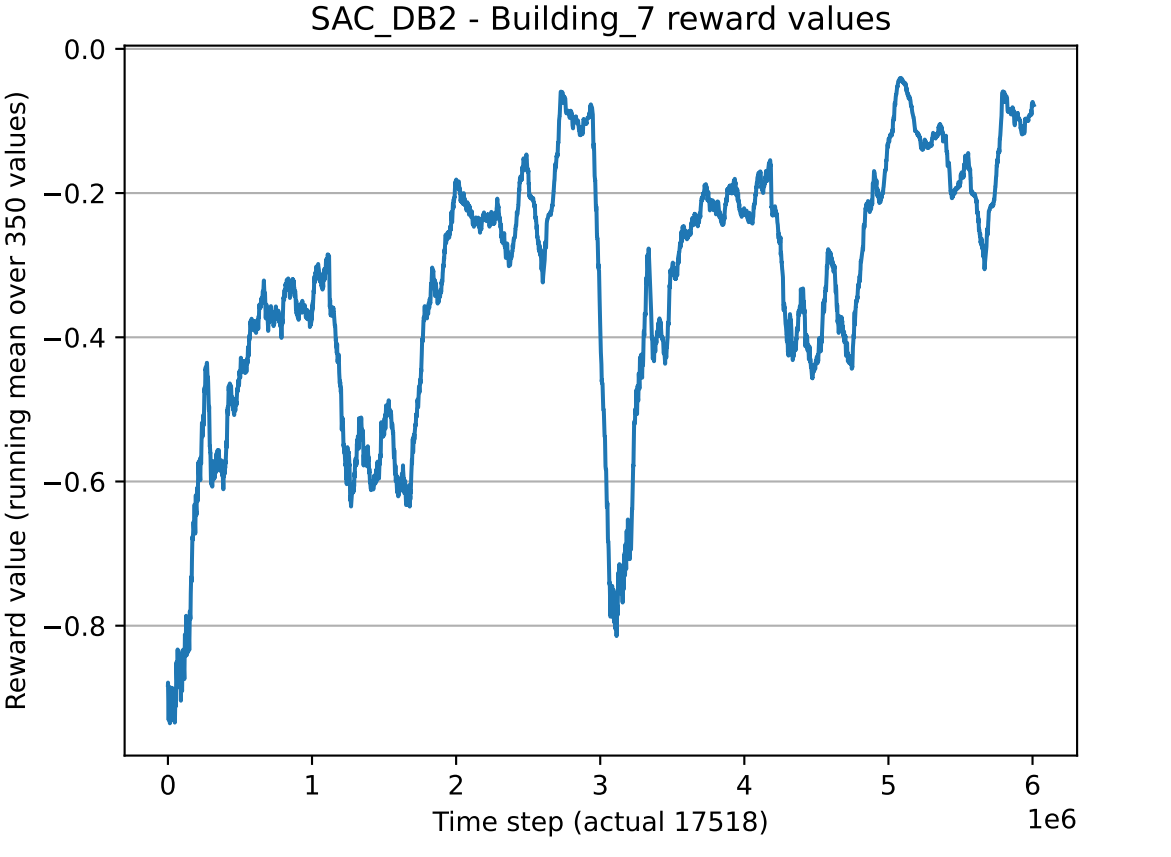

SAC - Building_8 reward values
Reward value (running mean over 350 values)
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
1
2
3
4
5
6
Time step (actual 17518)
1e6

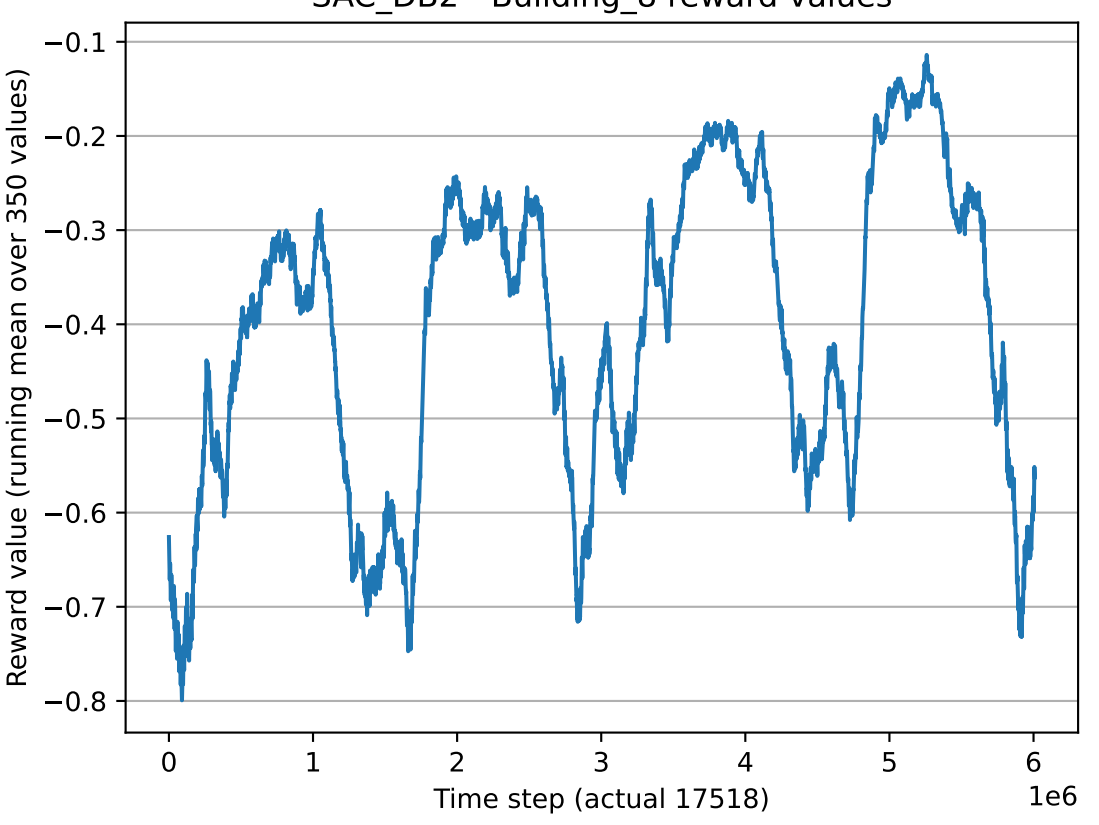

SAC - Building_11 reward values
Reward value (running mean over 350 values)
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
1
2
3
4
5
6
Time step (actual 17518)
1e6

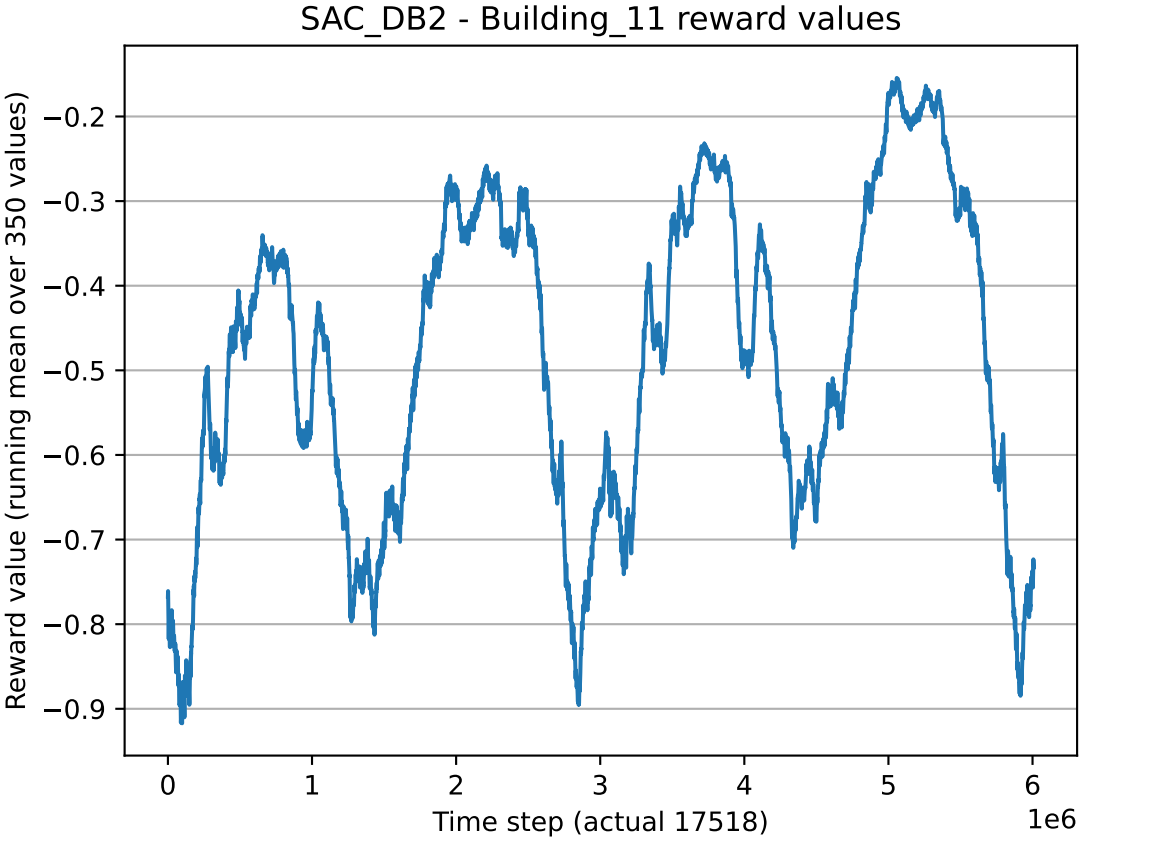

SAC - Building_17 reward values
Reward value (running mean over 350 values)
−0.2
−0.4
−0.6
−0.8
−1.0
−1.2
−1.4
−1.6
0
1
2
3
4
5
6
Time step (actual 17518)
1e6

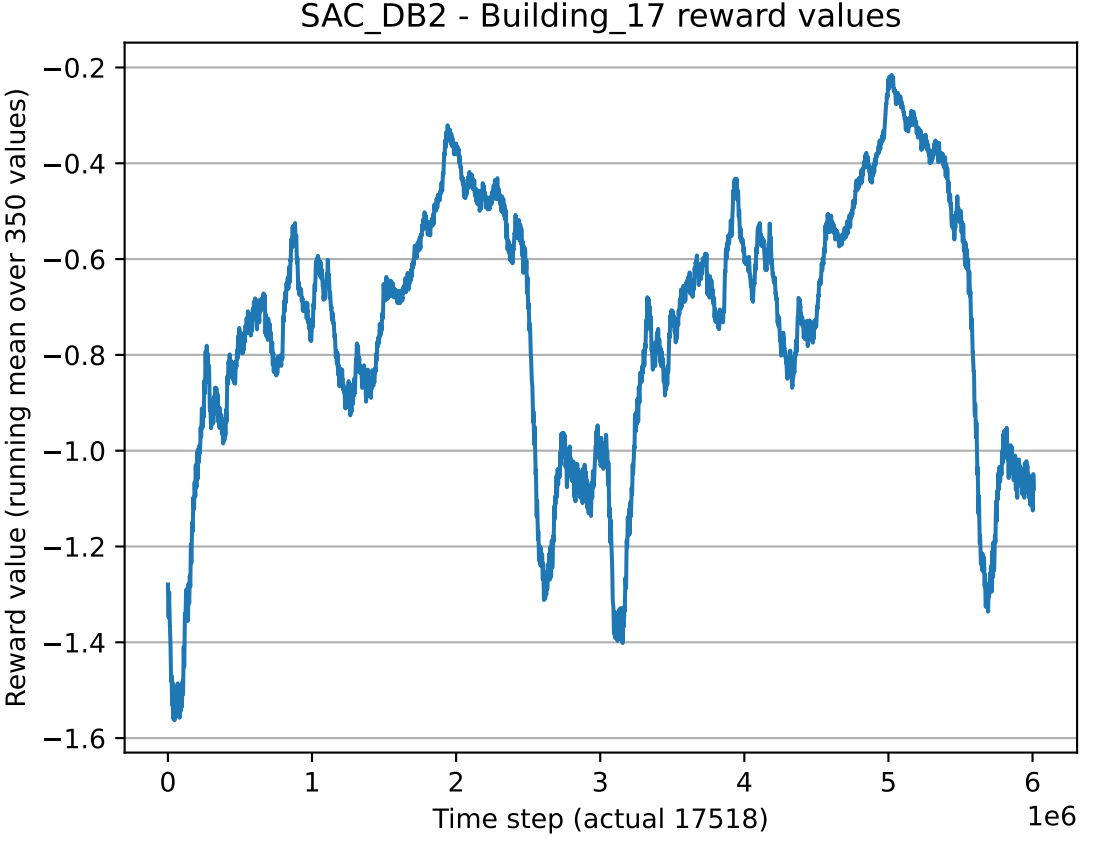

SAC_DB2 - Building_3 reward values
Reward value (running mean over 350 values)
−0.2
−0.4
−0.6
−0.8
−1.0
0
1
2
3
4
5
6
Time step (actual 17518)
1e6


SAC_DB2 - Building_5 reward values
Reward value (running mean over 350 values)
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
1
2
3
4
5
6
Time step (actual 17518)
1e6


SAC_DB2 - Building_7 reward values
Reward value (running mean over 350 values)
0.0
−0.2
−0.4
−0.6
−0.8
0
1
2
3
4
5
6
Time step (actual 17518)
1e6


SAC_DB2 - Building_8 reward values
Reward value (running mean over 350 values)
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
1
2
3
4
5
6
Time step (actual 17518)
1e6


SAC_DB2 - Building_11 reward values
Reward value (running mean over 350 values)
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
1
2
3
4
5
6
Time step (actual 17518)
1e6


SAC_DB2 - Building_17 reward values
Reward value (running mean over 350 values)
−0.2
−0.4
−0.6
−0.8
−1.0
−1.2
−1.4
−1.6
0
1
2
3
4
5
6
Time step (actual 17518)
1e6