Experiment Report

Start of automated test report 2023-04-29 19:16:17
Author=UNKNOWN@workstation obo Luke Vassallo

Machine Information

sysname=Linux
nodename=workstation
release=5.19.0-40-generic
version=#41~22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Fri Mar 31 16:00:14 UTC 2
machine=x86_64

CPU arch : X86_64
CPU bits : 64
CPU brand : Intel(R) Core(TM) i7-10700K CPU @ 3.80GHz
CPU cores : 8
CPU base clock : 3.8000 GHz
CPU boost clock : 3.7920 GHz
System Memory : 31.35GB
Nvidia driver version : 525.105.17
Device 0 : NVIDIA GeForce GTX 1080
Device 0 : 8.0GB

Library Information

python : 3.8.16
torch : 1.13.1+cu117
optuna : 3.1.0
numpy : 1.23.3
pandas : 1.5.3
matplotlib : 3.7.1
seaborn : 0.12.2

pcb library: generation of .pcb files.
Library version : 0.0.12
Library built with : C++14
Library built on : Mar 3 2023 23:10:31

netlist_graph: Graph pre-processing library for PCB component placement.
Library version : 0.1.16
Library built with : C++14
Library built on : Mar 3 2023 23:10:32

Hpyerparameters

/home/luke/work/rl_pcb/experiments/02_ablation_experiments/hyperparameters/hp_td3.json

learning_rate:0.001

buffer_size:25000

n_steps:2048

batch_size:128

gamma:0.99

net_arch:{'pi': [400, 300], 'qf': [400, 300]}

activation_fn:relu

expl_noise:0.1

tau:0.005

policy_noise:0.2

noise_clip:0.5

policy_freq:2

/home/luke/work/rl_pcb/experiments/02_ablation_experiments/hyperparameters/hp_sac.json

learning_rate:0.0003

buffer_size:25000

n_steps:2048

batch_size:256

gamma:0.99

net_arch:{'pi': [400, 300], 'qf': [400, 300]}

activation_fn:relu

expl_noise:0.1

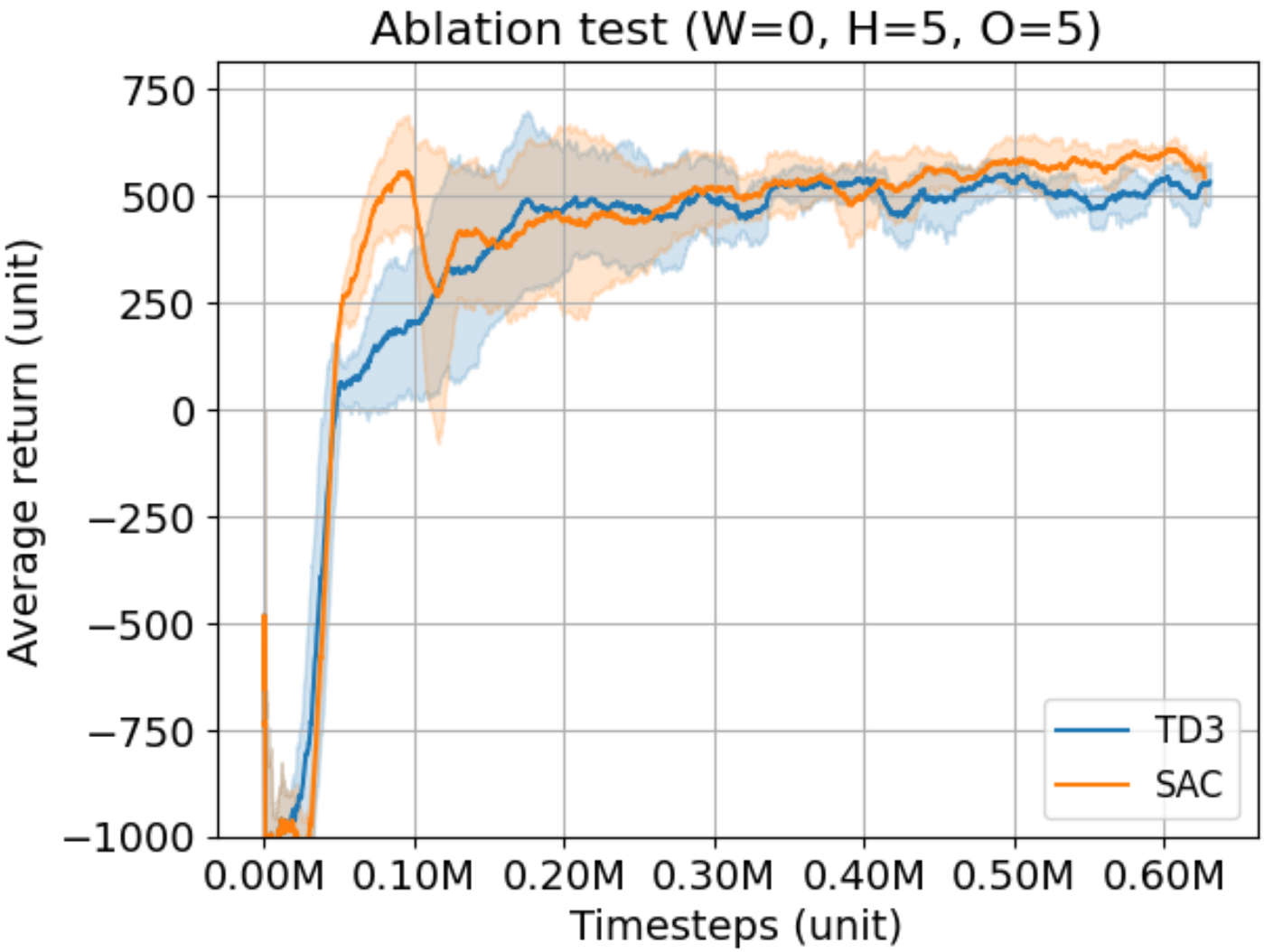
tau:0.005

policy_noise:0.2

noise_clip:0.5

policy_freq:1

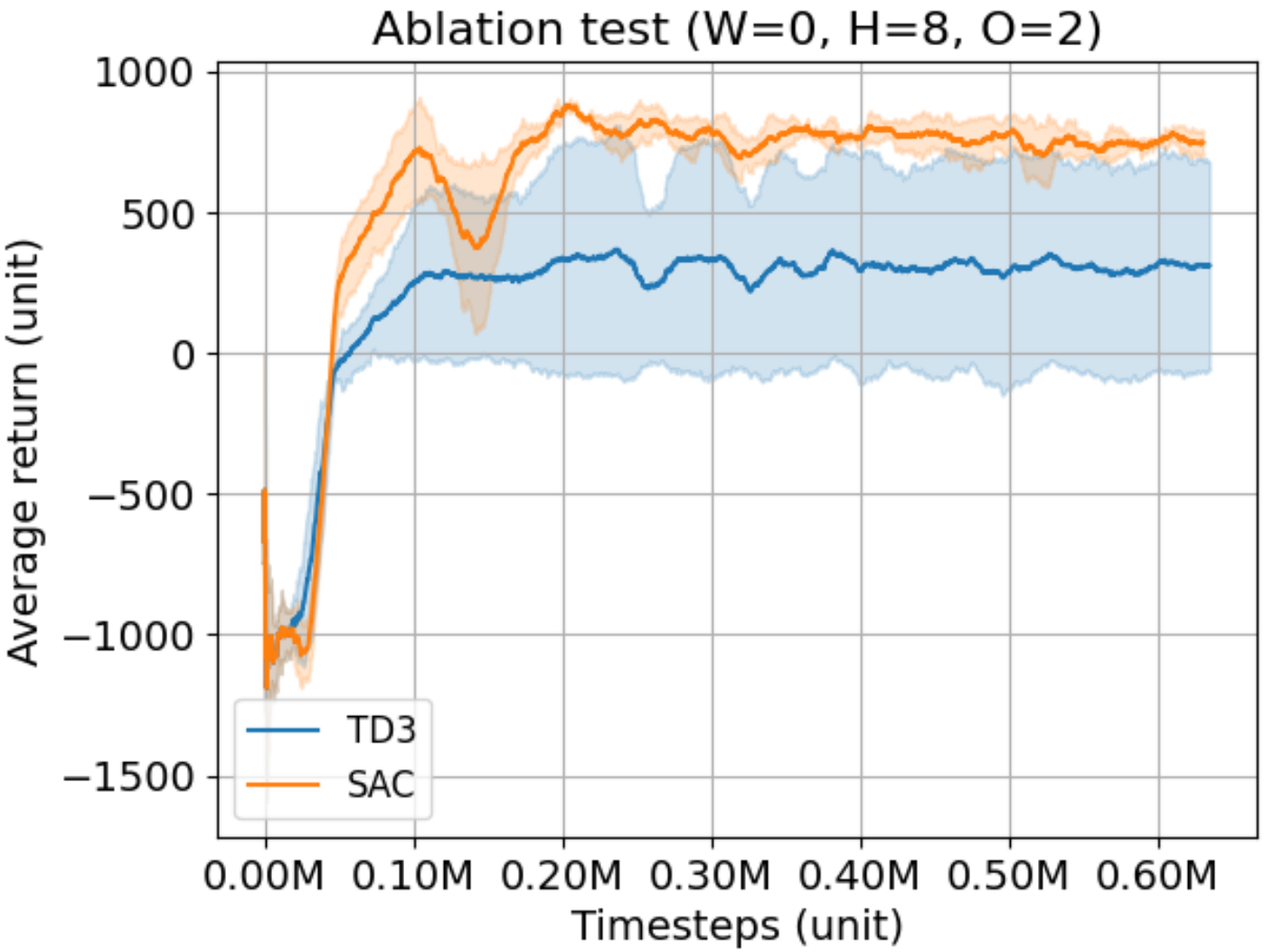
experiment=ablation_test_055
experiments=['ablation_experiment_055']
algorithms=['TD3', 'SAC']
averaging window=100 (user assigned)



title	experiment_055:TD3	experiment_055:SAC
run #0	513.3878 ± 294.3194	581.2231 ± 178.1601
run #1	552.6828 ± 201.9170	592.7449 ± 360.0275
run #2	470.5475 ± 389.4666	544.4290 ± 192.8505
run #3	504.2425 ± 249.0558	594.2310 ± 197.2305
mean	510.2151 ± 283.6897	578.1570 ± 232.0672

runs_involved=['1682487597_0', '1682487597_1', '1682487597_2', '1682487597_3', '1682619637_0', '1682619637_1', '1682619637_2', '1682619637_3']

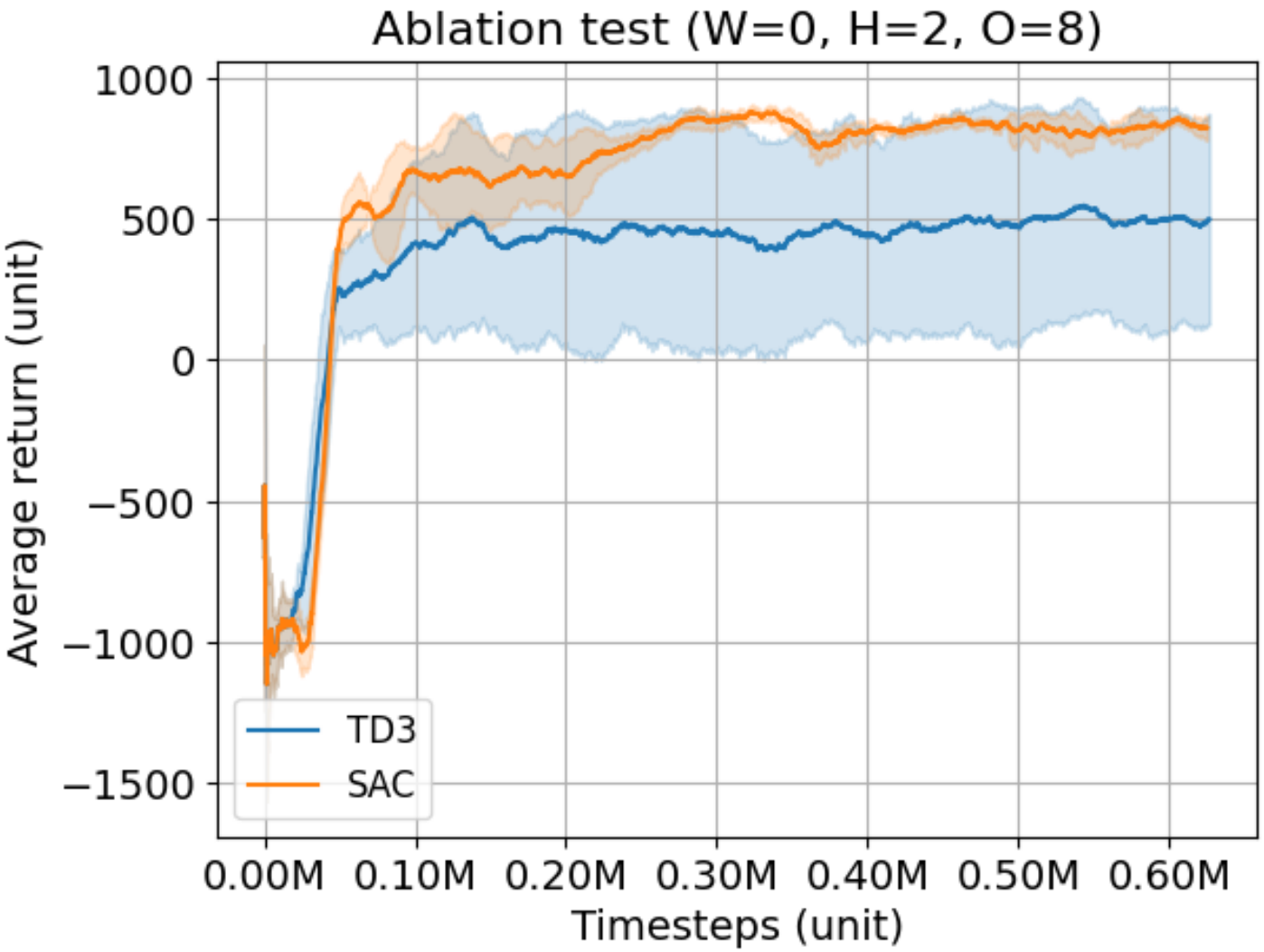
experiment=ablation_test_082
experiments=['ablation_experiment_082']
algorithms=['TD3', 'SAC']
averaging window=100 (user assigned)



title	experiment_082:TD3	experiment_082:SAC
run #0	-19.8219 ± 283.3299	753.3696 ± 435.8691
run #1	636.3289 ± 361.1505	788.1806 ± 409.2463
run #2	628.4005 ± 371.4958	720.1121 ± 331.5190
run #3	-23.5628 ± 270.7585	709.8242 ± 426.7282
mean	305.3362 ± 321.6837	742.8716 ± 400.8407

runs_involved=['1682487599_0', '1682487599_1', '1682487599_2', '1682487599_3', '1682622426_0', '1682622426_1', '1682622426_2', '1682622426_3']

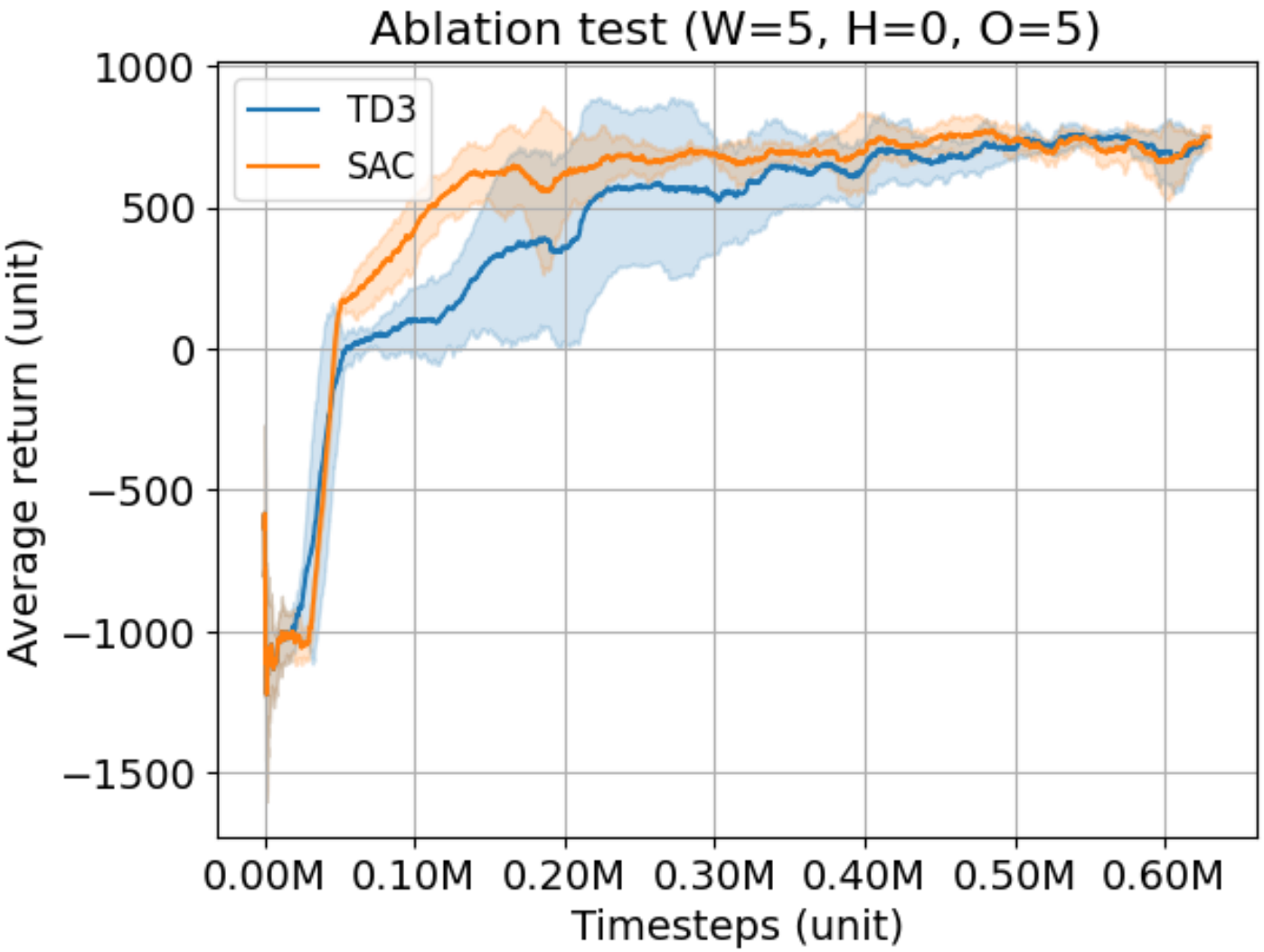
experiment=ablation_test_028
experiments=['ablation_experiment_028']
algorithms=['TD3', 'SAC']
averaging window=100 (user assigned)



title	experiment_028:TD3	experiment_028:SAC
run #0	221.2518 ± 305.2895	839.0575 ± 213.7580
run #1	122.7140 ± 426.2433	820.1003 ± 278.8396
run #2	818.7556 ± 282.2463	780.2335 ± 355.0220
run #3	831.8785 ± 232.8948	860.2067 ± 227.8160
mean	498.6500 ± 311.6685	824.8995 ± 268.8589

runs_involved=['1682487601_0', '1682487601_1', '1682487601_2', '1682487601_3', '1682622818_0', '1682622818_1', '1682622818_2', '1682622818_3']

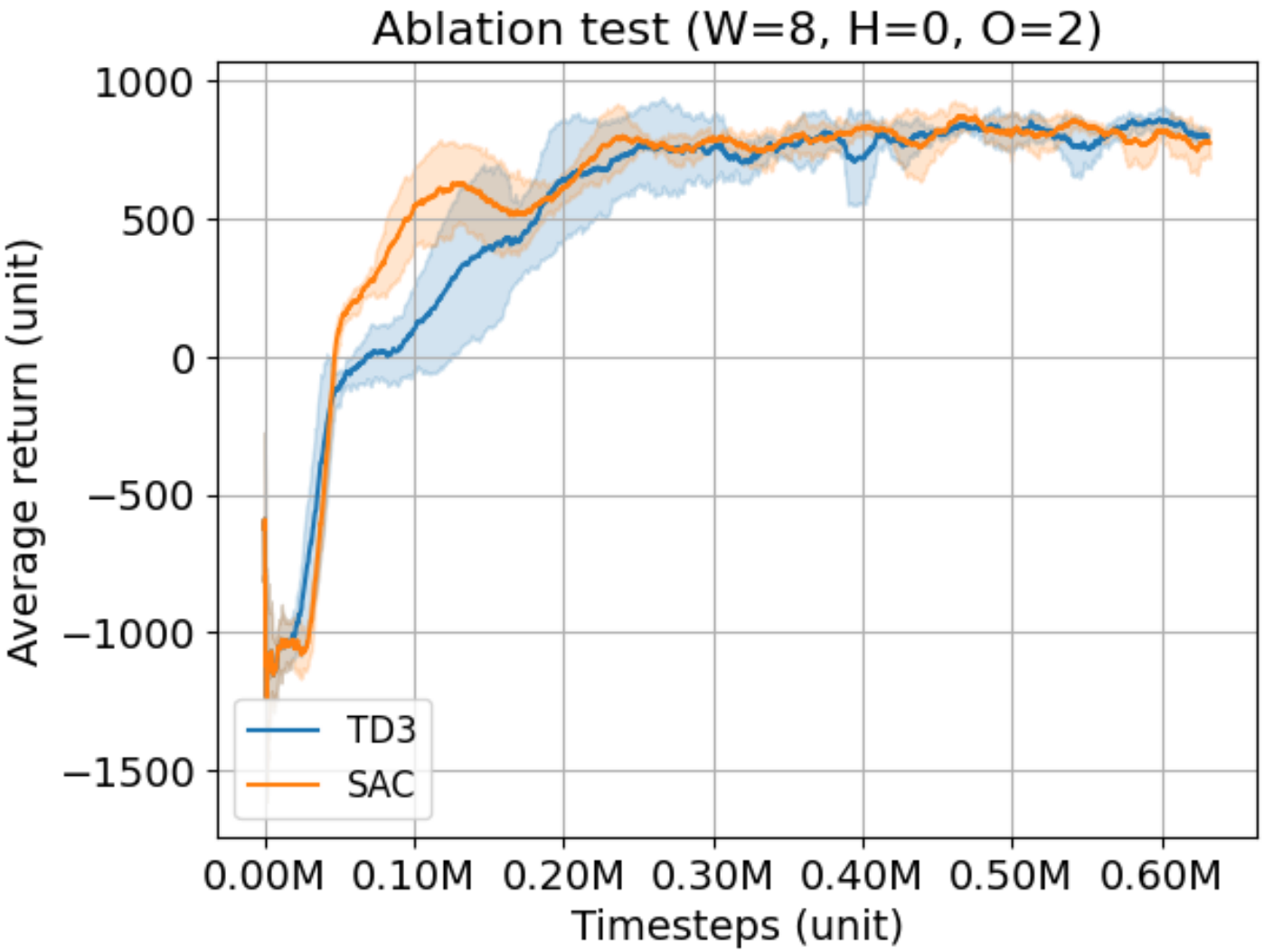
experiment=ablation_test_505
experiments=['ablation_experiment_505']
algorithms=['TD3', 'SAC']
averaging window=100 (user assigned)



title	experiment_505:TD3	experiment_505:SAC
run #0	730.7985 ± 249.1331	749.9820 ± 304.1848
run #1	720.6429 ± 424.4268	668.2410 ± 455.3152
run #2	758.7773 ± 250.8956	697.3186 ± 355.3651
run #3	709.6923 ± 381.3612	735.4271 ± 355.3476
mean	729.9778 ± 326.4542	712.7422 ± 367.5532

runs_involved=['1682487603_0', '1682487603_1', '1682487603_2', '1682487603_3', '1682623793_0', '1682623793_1', '1682623793_2', '1682623793_3']

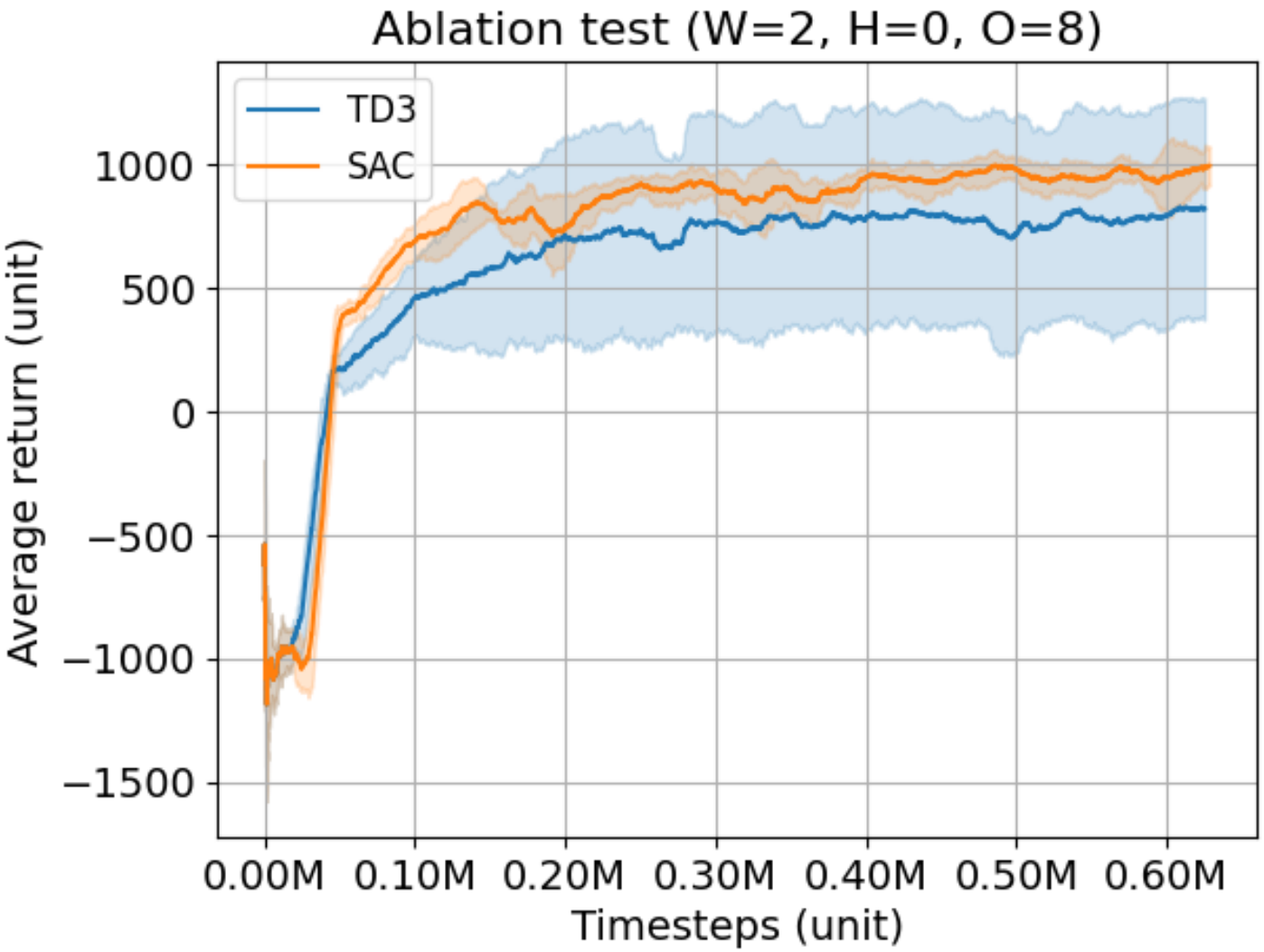
experiment=ablation_test_802
experiments=['ablation_experiment_802']
algorithms=['TD3', 'SAC']
averaging window=100 (user assigned)



title	experiment_802:TD3	experiment_802:SAC
run #0	793.4320 ± 437.6586	783.4446 ± 400.2392
run #1	810.3348 ± 387.0244	836.9417 ± 343.7886
run #2	834.1376 ± 285.0222	813.8627 ± 303.6448
run #3	813.8350 ± 355.7976	777.0950 ± 380.0457
mean	812.9349 ± 366.3757	802.8360 ± 356.9296

runs_involved=['1682487605_0', '1682487605_1', '1682487605_2', '1682487605_3', '1682624196_0', '1682624196_1', '1682624196_2', '1682624196_3']

experiment=ablation_test_208
experiments=['ablation_experiment_208']
algorithms=['TD3', 'SAC']
averaging window=100 (user assigned)



title	experiment_208:TD3	experiment_208:SAC
run #0	119.2684 ± 407.9214	1006.8231 ± 322.1968
run #1	1000.8976 ± 367.2534	877.7101 ± 376.1198
run #2	1007.8708 ± 246.8230	1028.2944 ± 279.5129
run #3	1015.0708 ± 269.6878	942.5392 ± 248.7368
mean	785.7769 ± 322.9214	963.8417 ± 306.6415

runs_involved=['1682487607_0', '1682487607_1', '1682487607_2', '1682487607_3', '1682624534_0', '1682624534_1', '1682624534_2', '1682624534_3']

End of automated test report 2023-04-29 19:16:33