

Atlanta_Eff_ExtrmSum_RB_2004_TypOcc_TypBehav_NoTES_09242022_082224_Fail

Fail

24-Jul-2024

Commucation delay: Pass (evaluated period: 0:01-24:00)

Maximum delay: 72.229 sec

Average delay: 25.0291 sec

Simulation data completeness: Pass

SimData: 1441

Measurements: 1441

OccupantMatrix: 1441

SupvCtrlSig: 1441

EPlusOutput: 2880

Hardware missing data: Pass

random missing: Pass

continuous missing: Pass

Emulation accuracy: Fail (evaluated period: 0:01 - 24:00)

T_z emulation: Warning

Criteria: RMSE \leq 0.44 °C

RMSE: 1.0681 °C

NRMSE: 0.040518

Simulated Mean: 26.3617 °C

Emulated Mean: 26.2414 °C

T_{out} emulation: Fail

Criteria: RMSE \leq 0.44 °C

RMSE: 1.1727 °C

NRMSE: 0.040226

Simulated Mean: 29.1534 °C

Emulated Mean: 29.0956 °C

Td_z emulation: Warning

Criteria: RMSE \leq 0.44 °C

RMSE: 1.4244 °C
NRMSE: 0.094713
Simulated Mean: 15.0387 °C
Emulated Mean: 14.3524 °C

h_sen_out emulation (hourly): Warning

hour # w/ significant errors: 1 2 9
significant errors: -9.117 3.615 -0.517%

Qtot_z emulation (hourly): Pass

hour # w/ significant errors:
significant errors: %

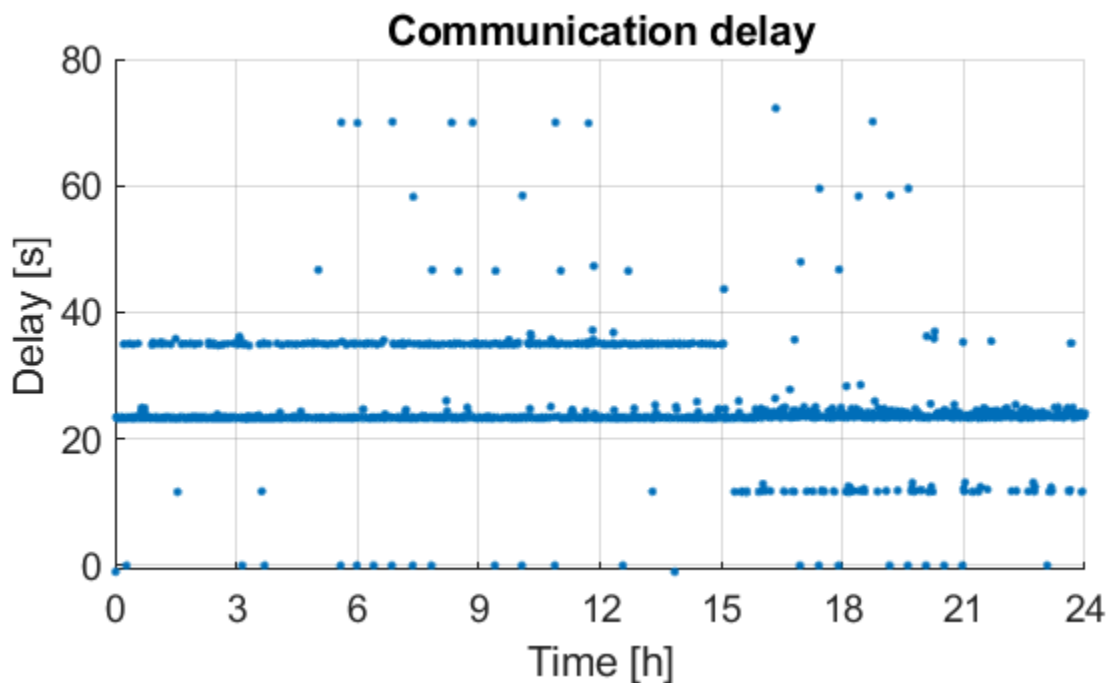
System performance: Pass (evaluated period: 0:01 - 24:00)

zone temperature control: Pass

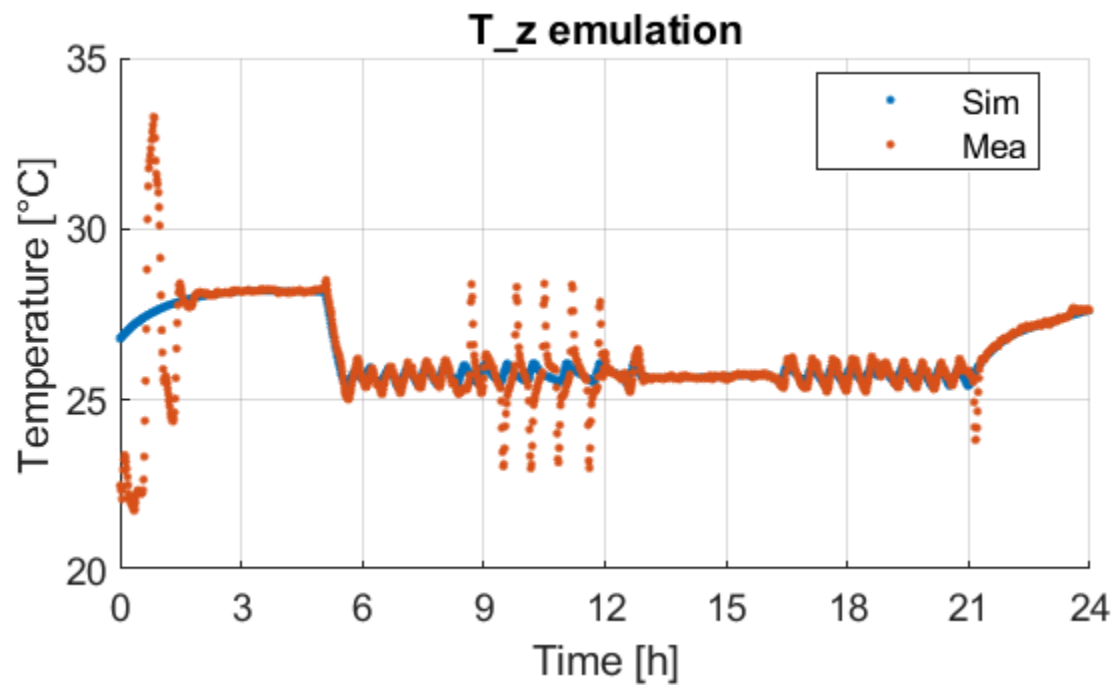
Zone temperature is 1 °C higher than the setpoint for 19 timesteps
Zone temperature is 1 °C lower than the setpoint for 0 timesteps

Plots

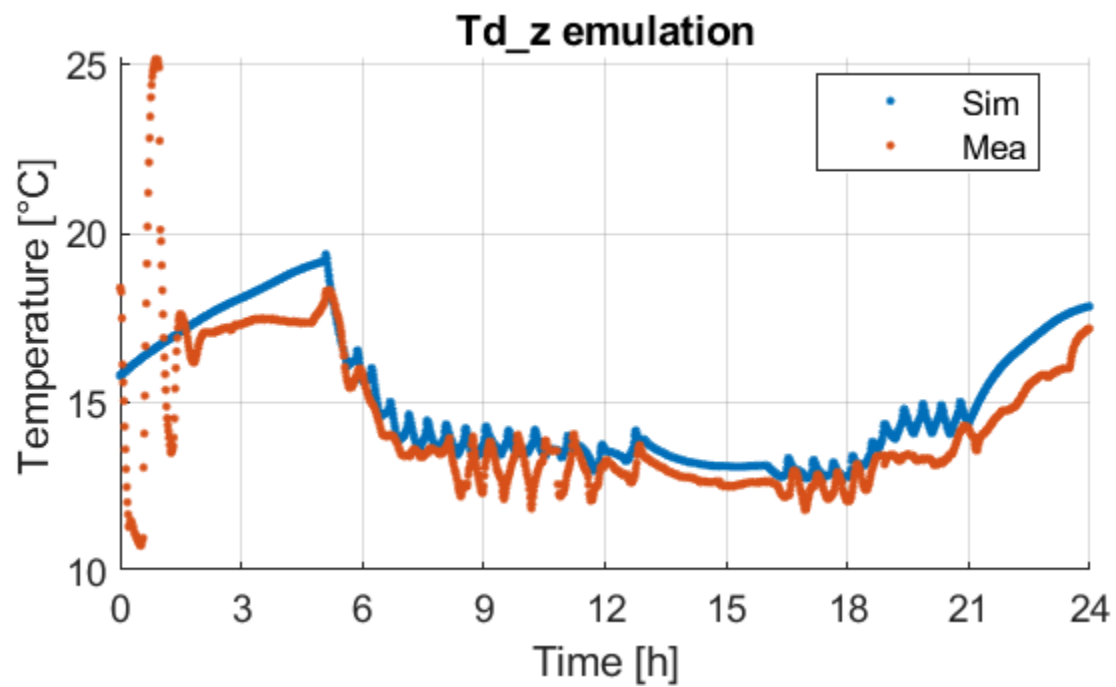
communication delay



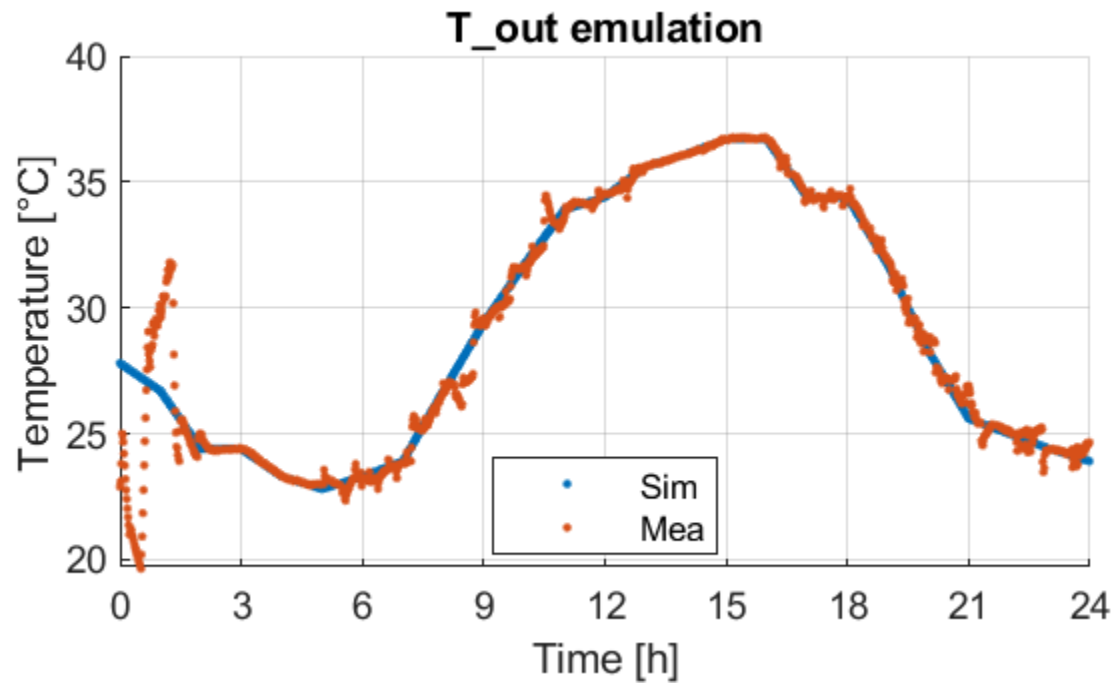
T_z emulation



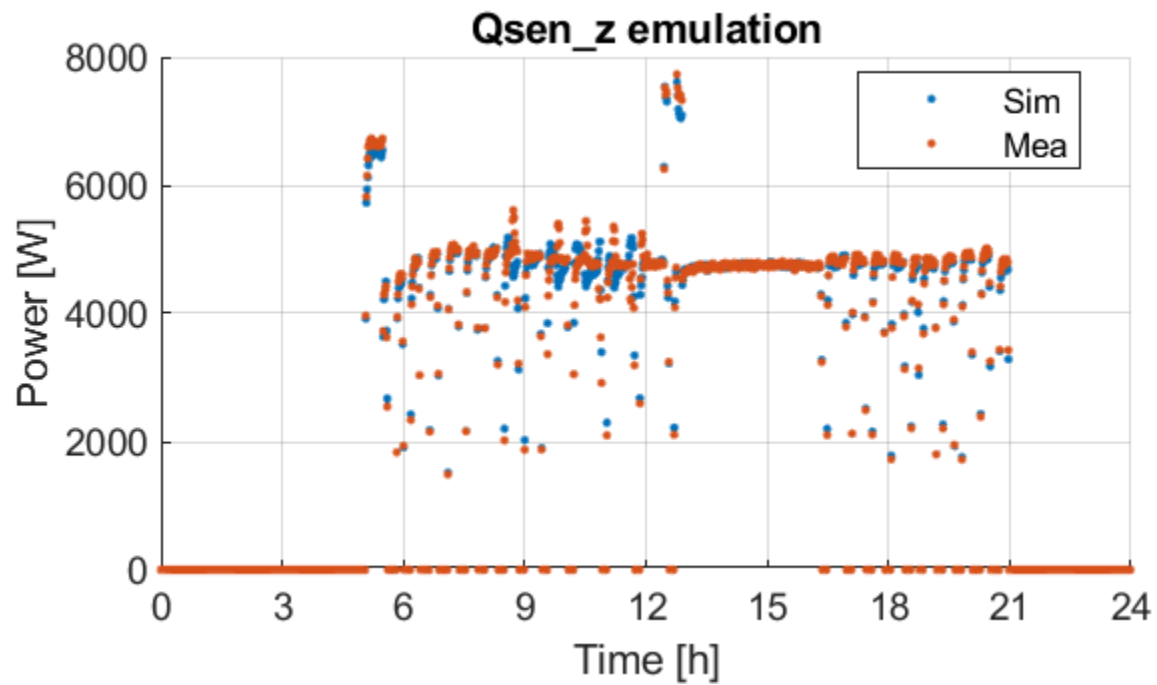
Td_z emulation



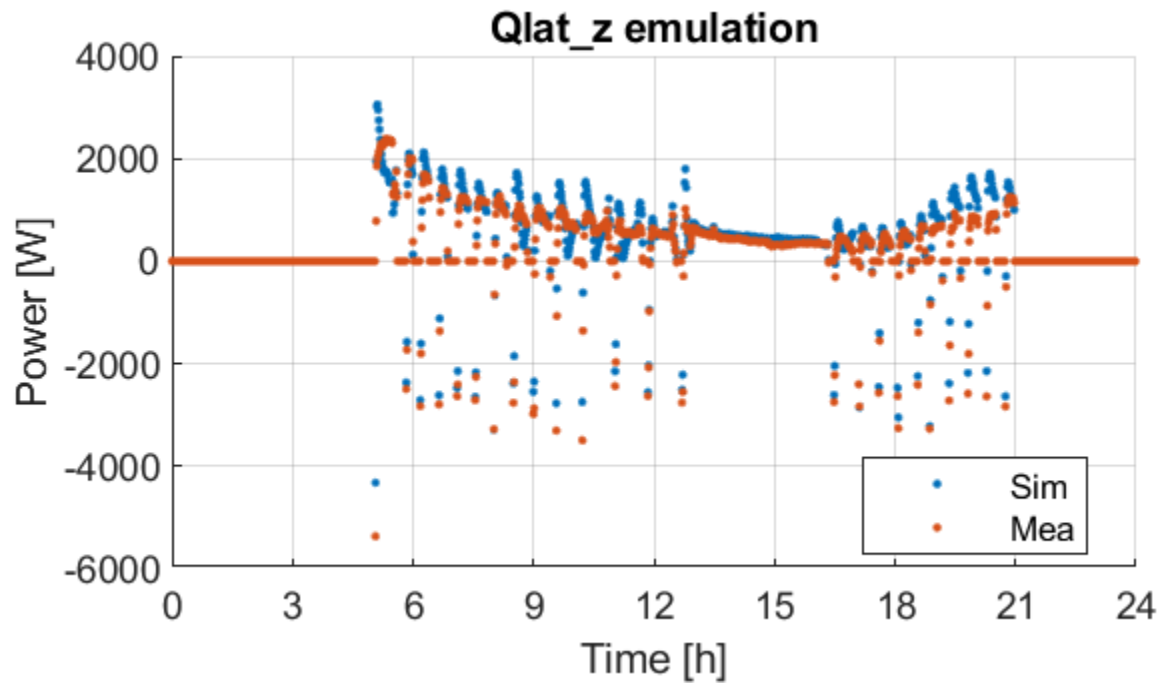
T_{out} emulation



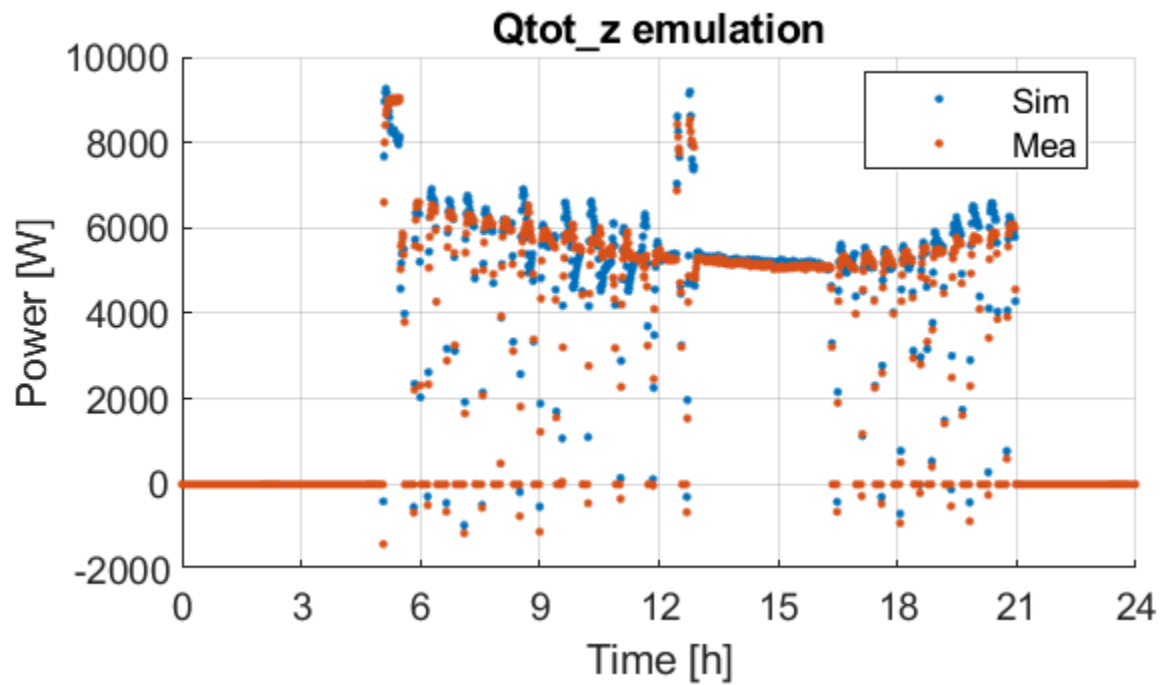
Q_{sen_z} emulation



Qlat_z emulation



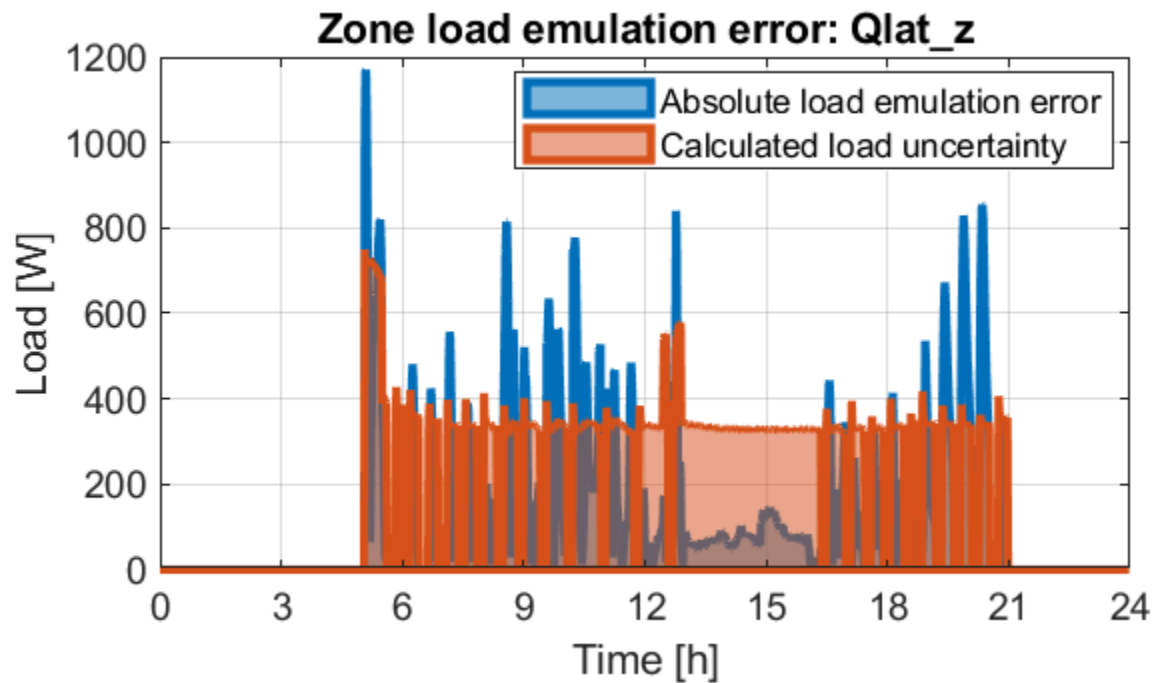
Qtot_z emulation



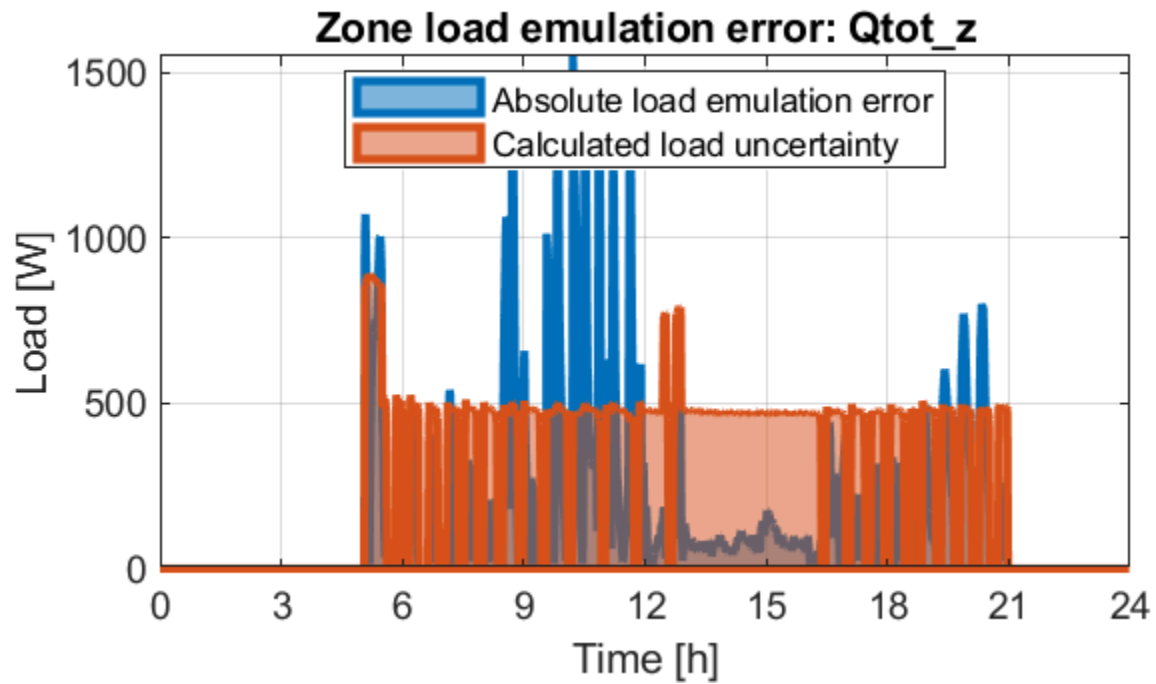
Qsen_z load emulation error



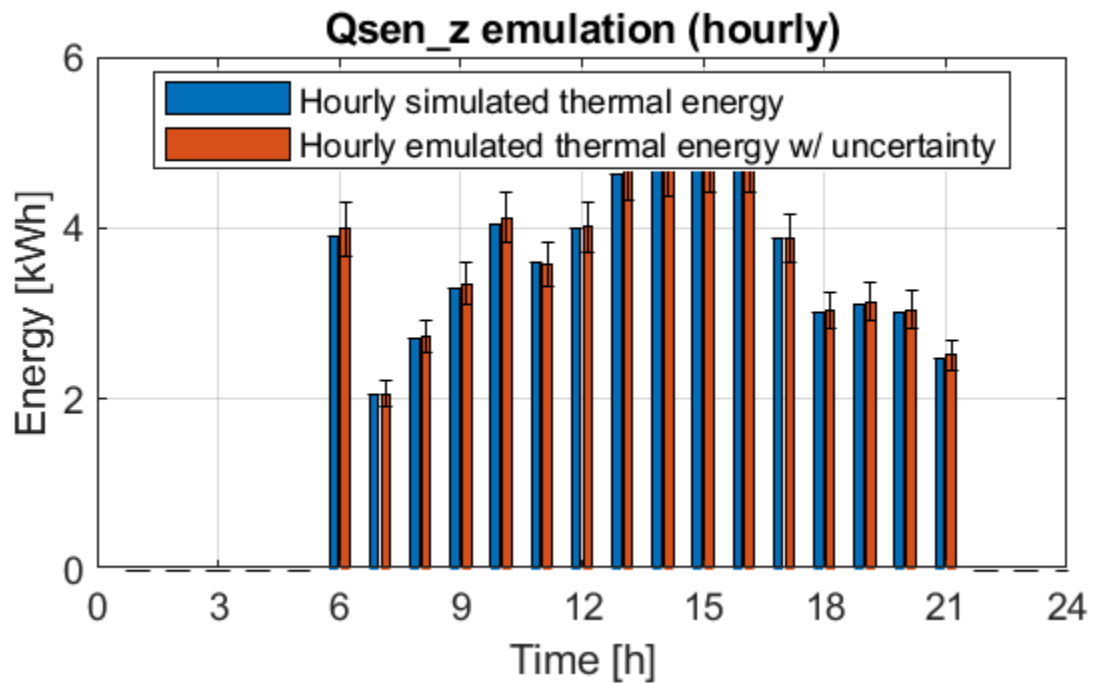
Qlat_z load emulation error



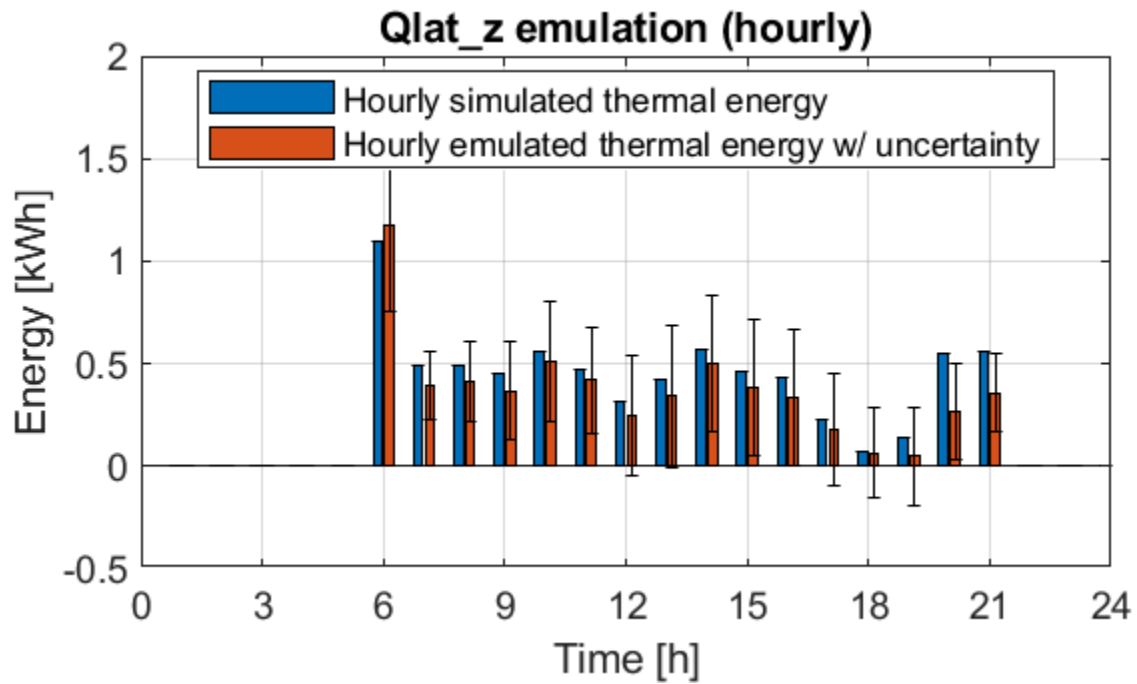
Qtot_z load emulation error



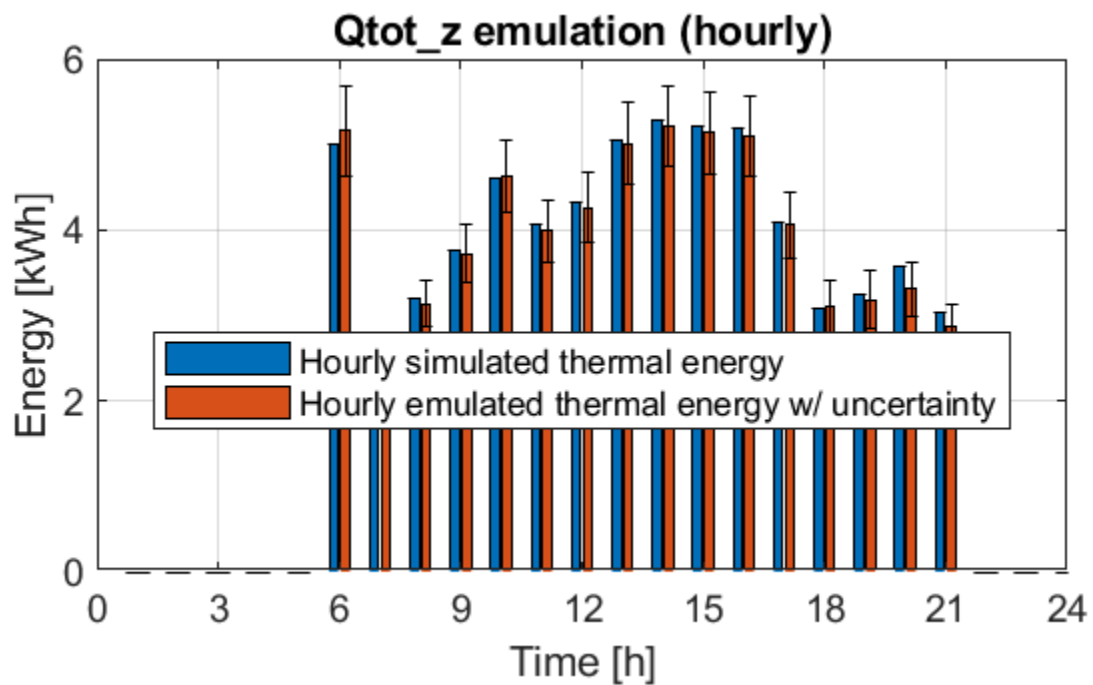
Qsen_z emulation (hourly)



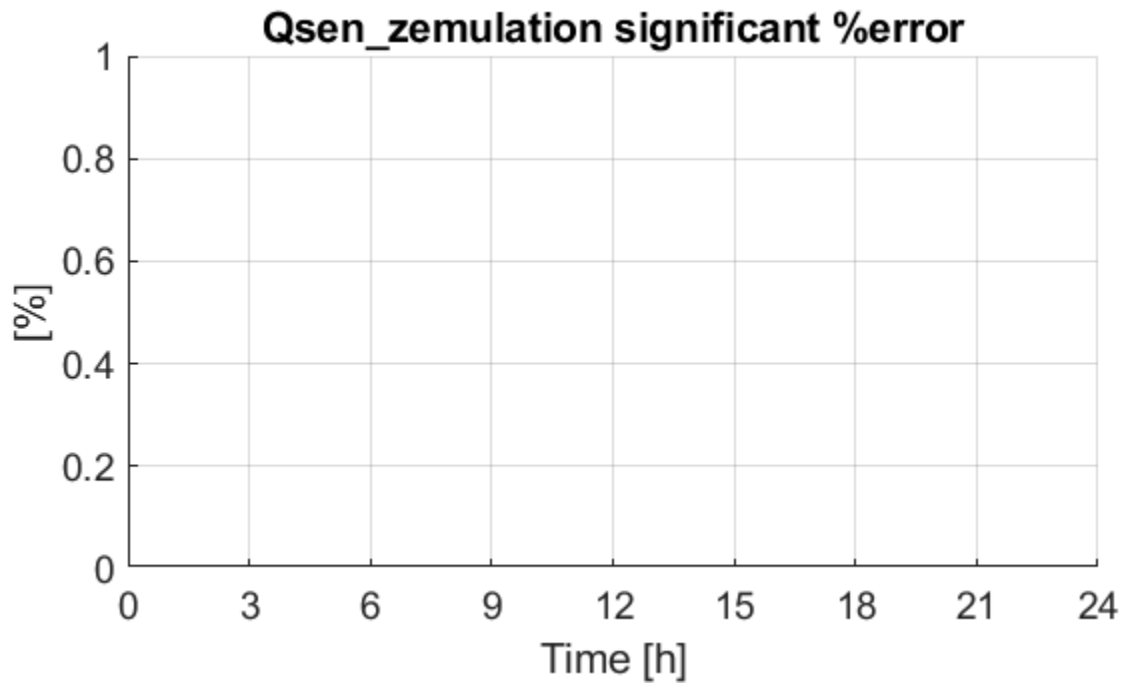
Qlat_z emulation (hourly)



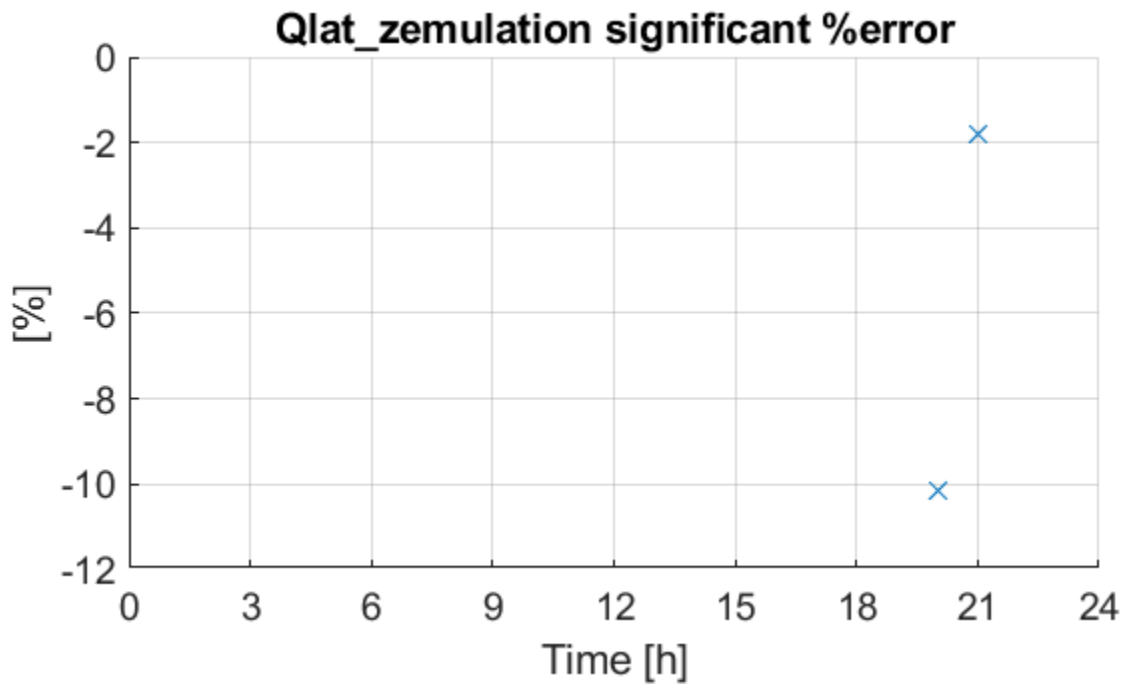
Qtot_z emulation (hourly)



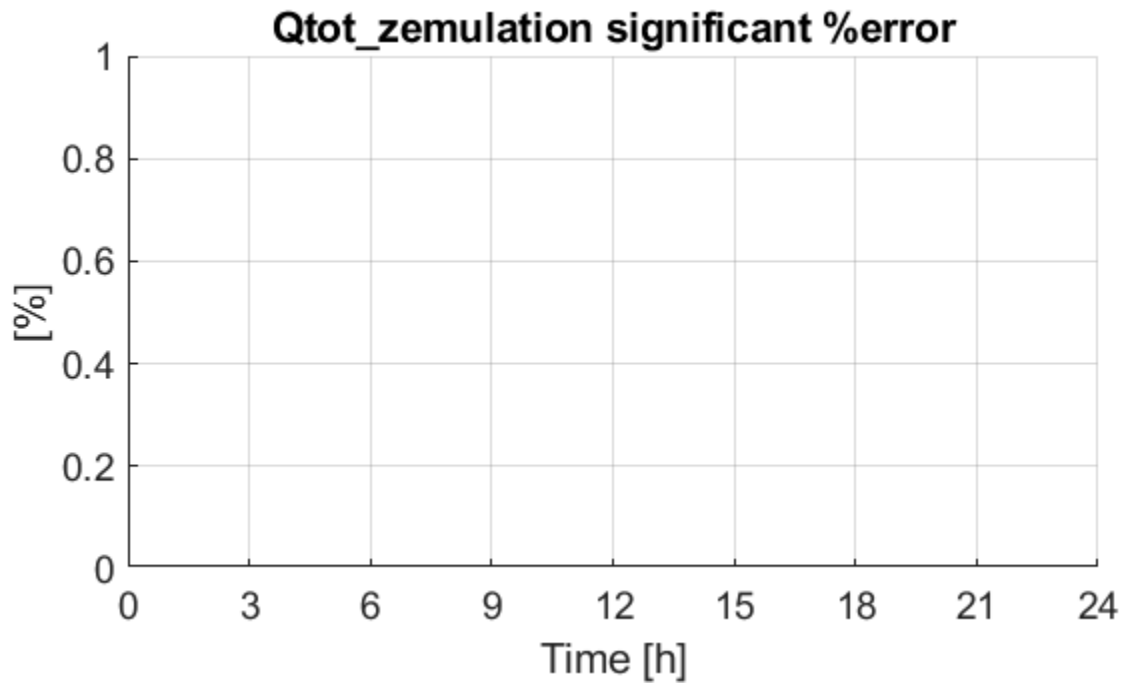
Qsen_zemulation significant %error



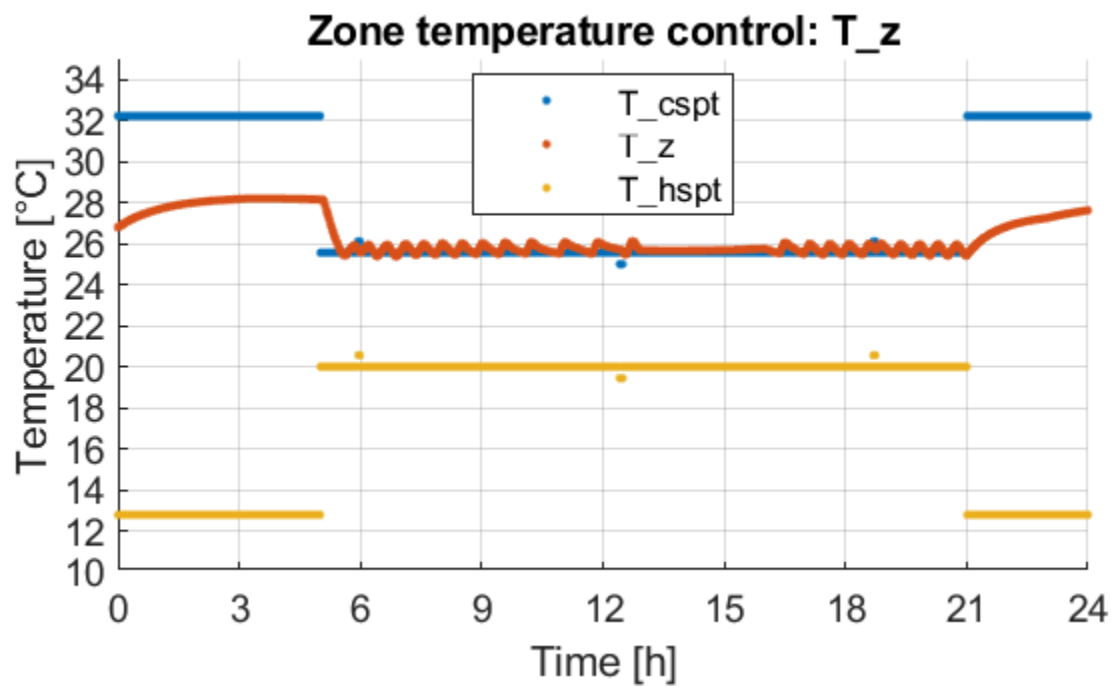
Qlat_zemulation significant %error



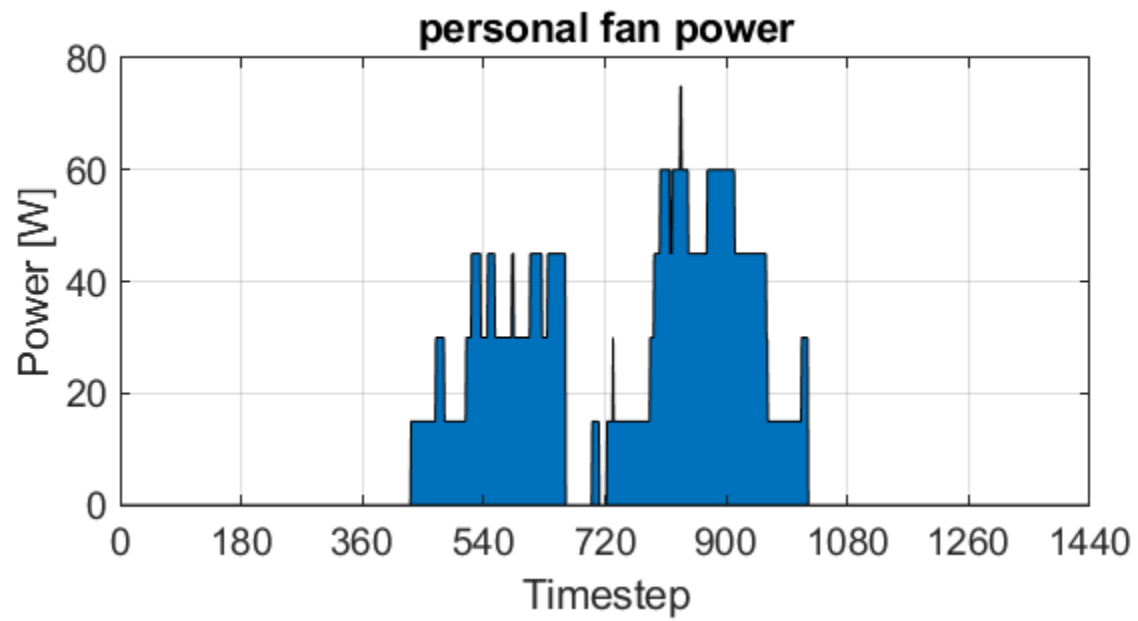
Qtot_zemulation significant %error



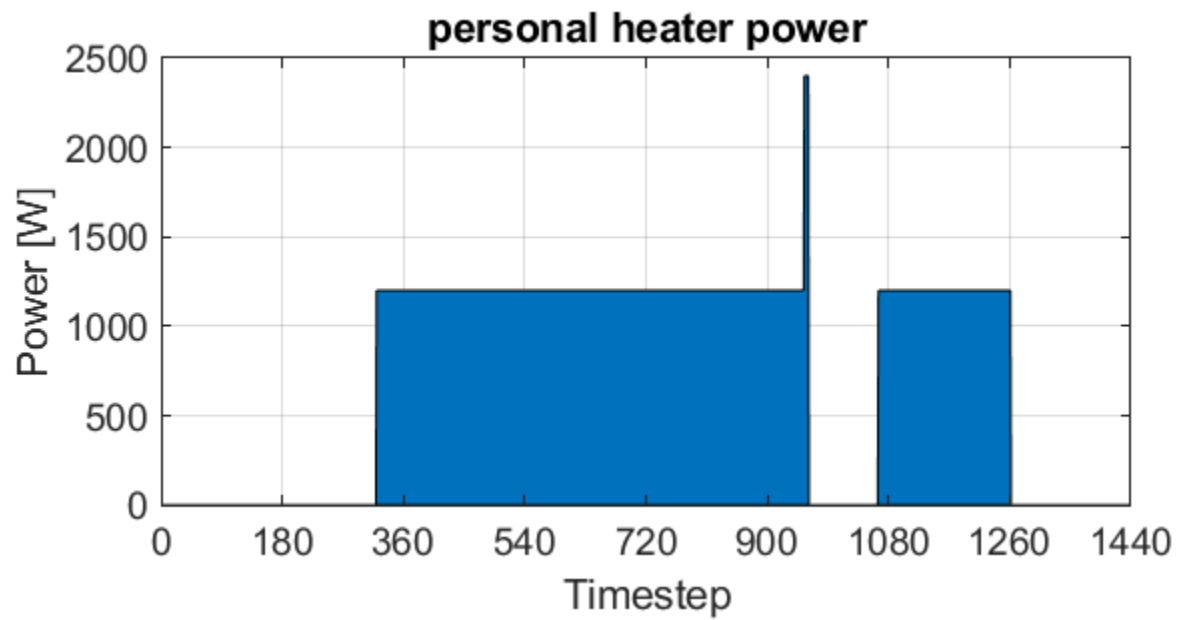
T_z control



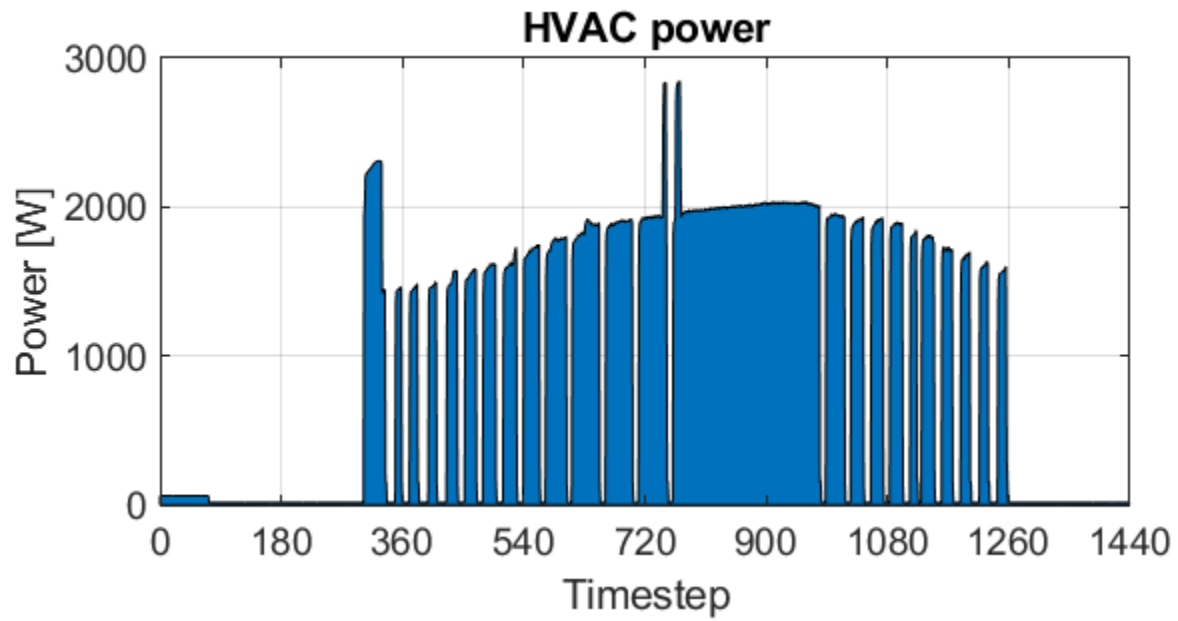
personal fan power



personal heater power



HVAC power



total power

