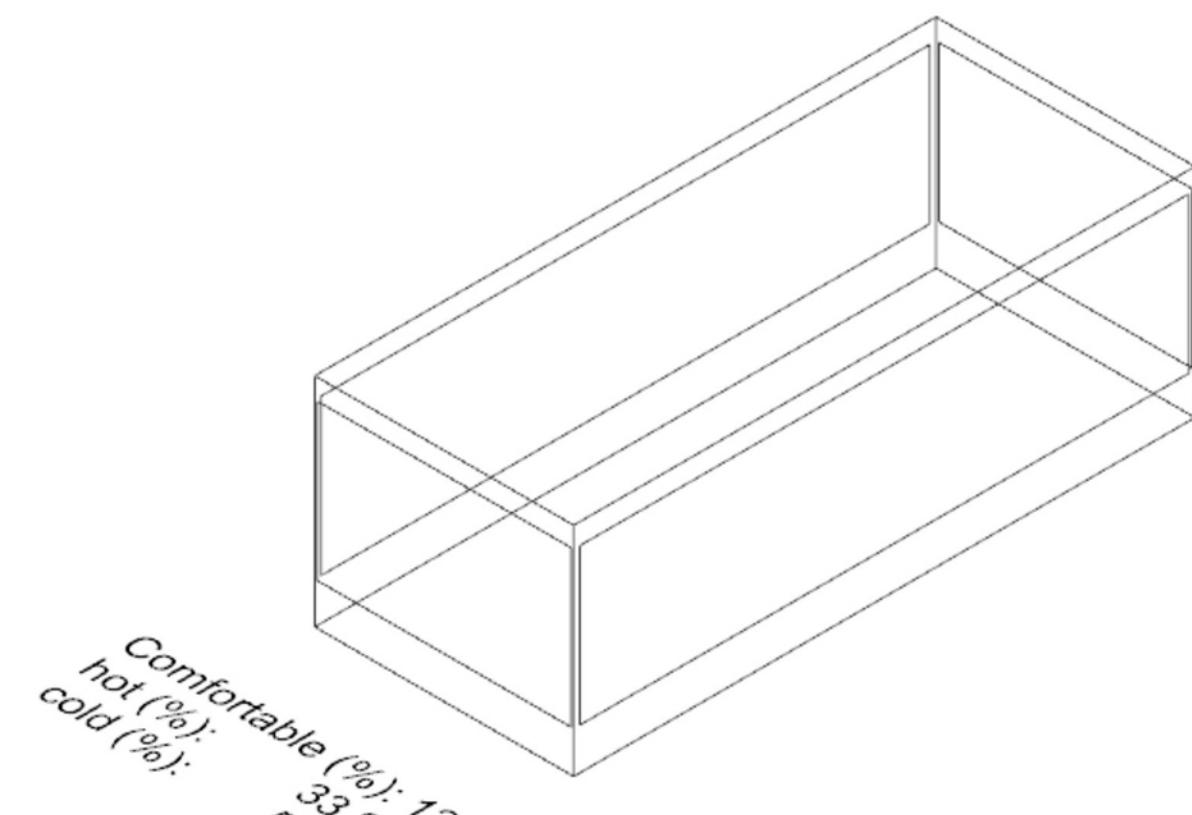
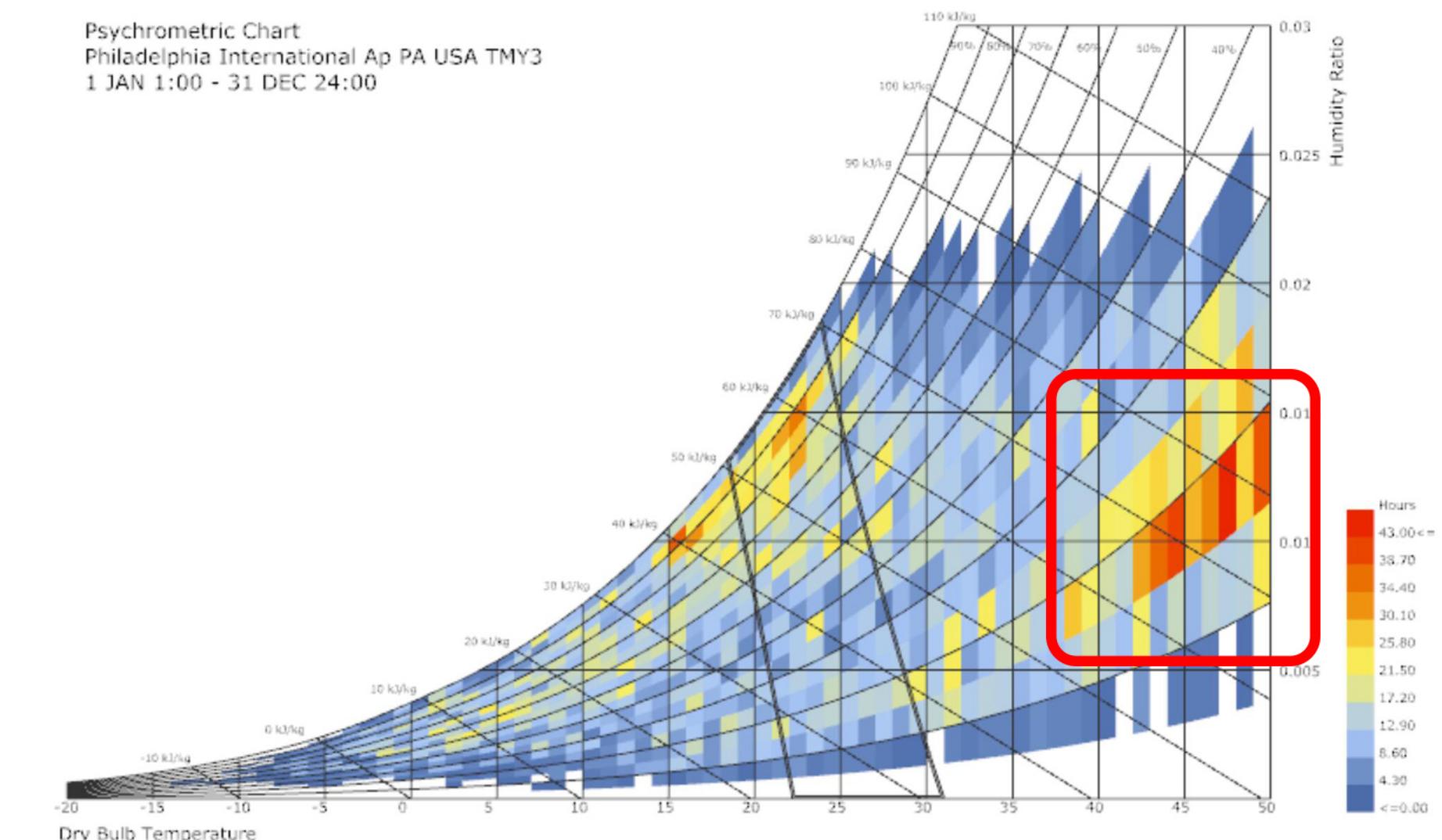


# ENERGY SIMULATION

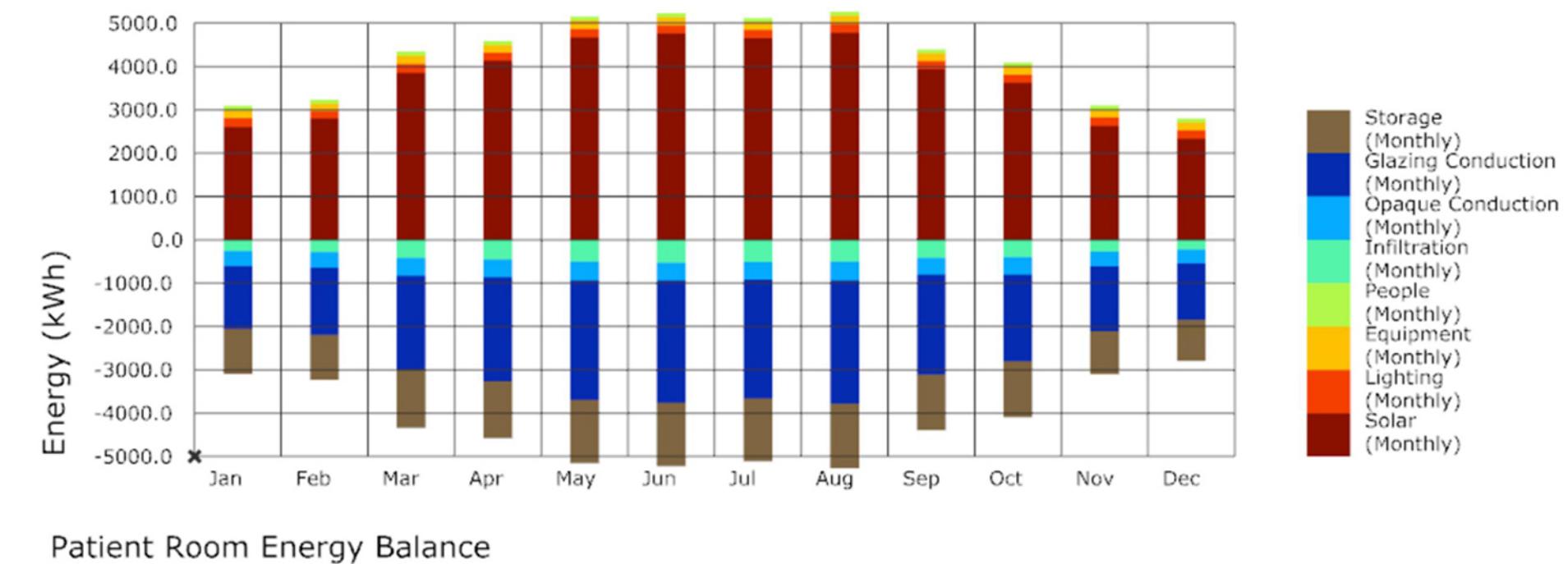
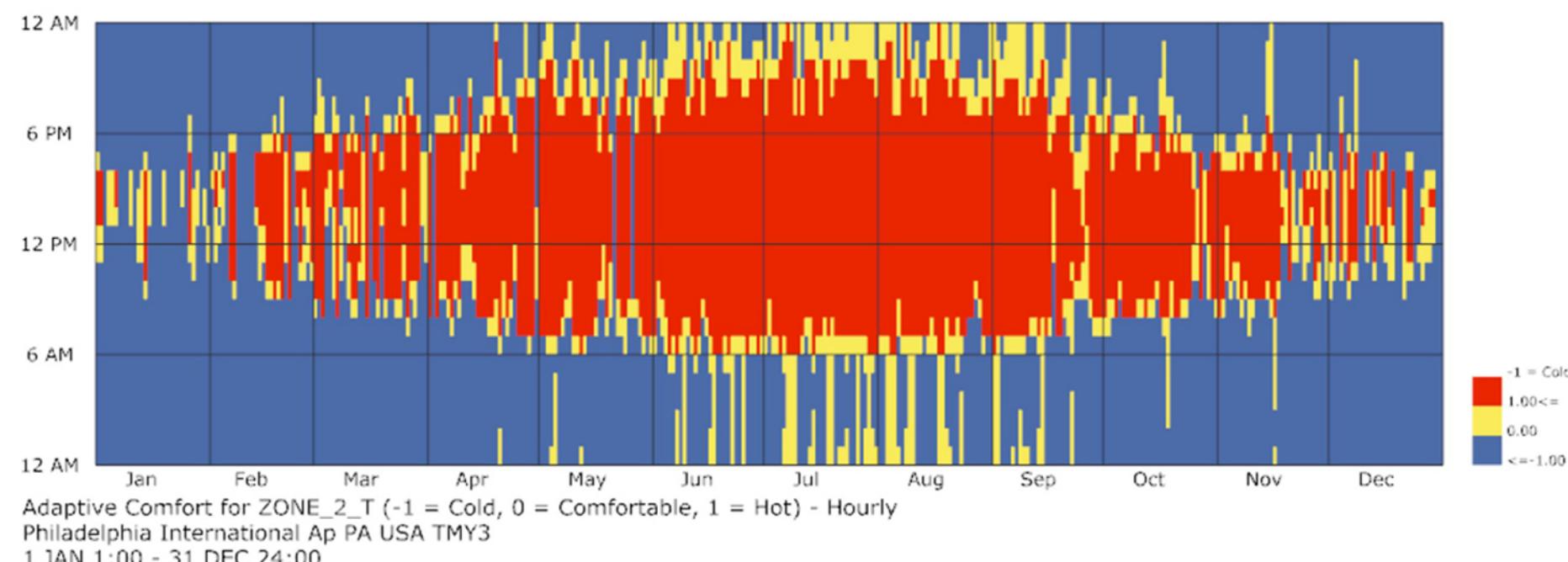
## SHENGJI TAN



Psychrometric Chart  
Philadelphia International Ap PA USA TMY3  
1 JAN 1:00 - 31 DEC 24:00

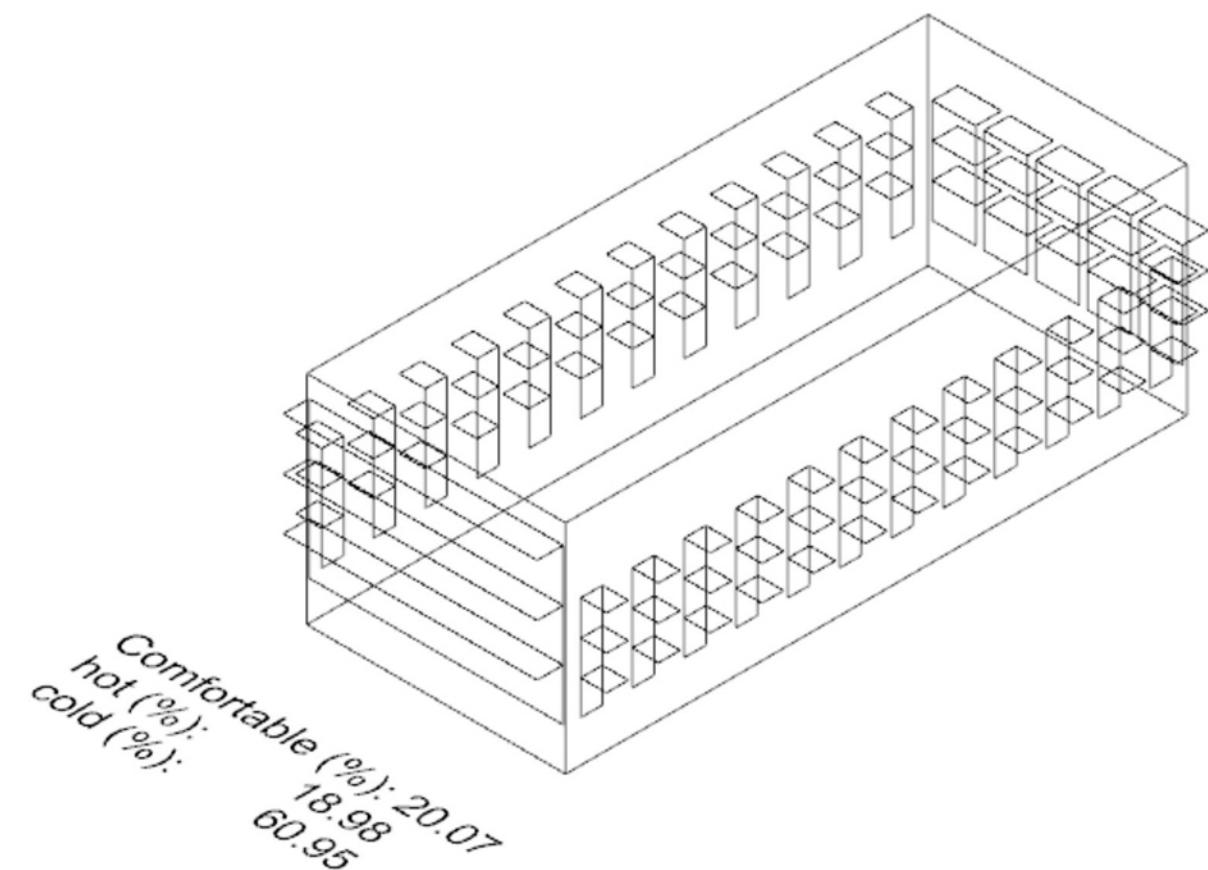


According to Psychrometric Chart: too much hours are on the high temperature level. Next sept should try to decrease to ratio of opening in order to reduce the radiation.

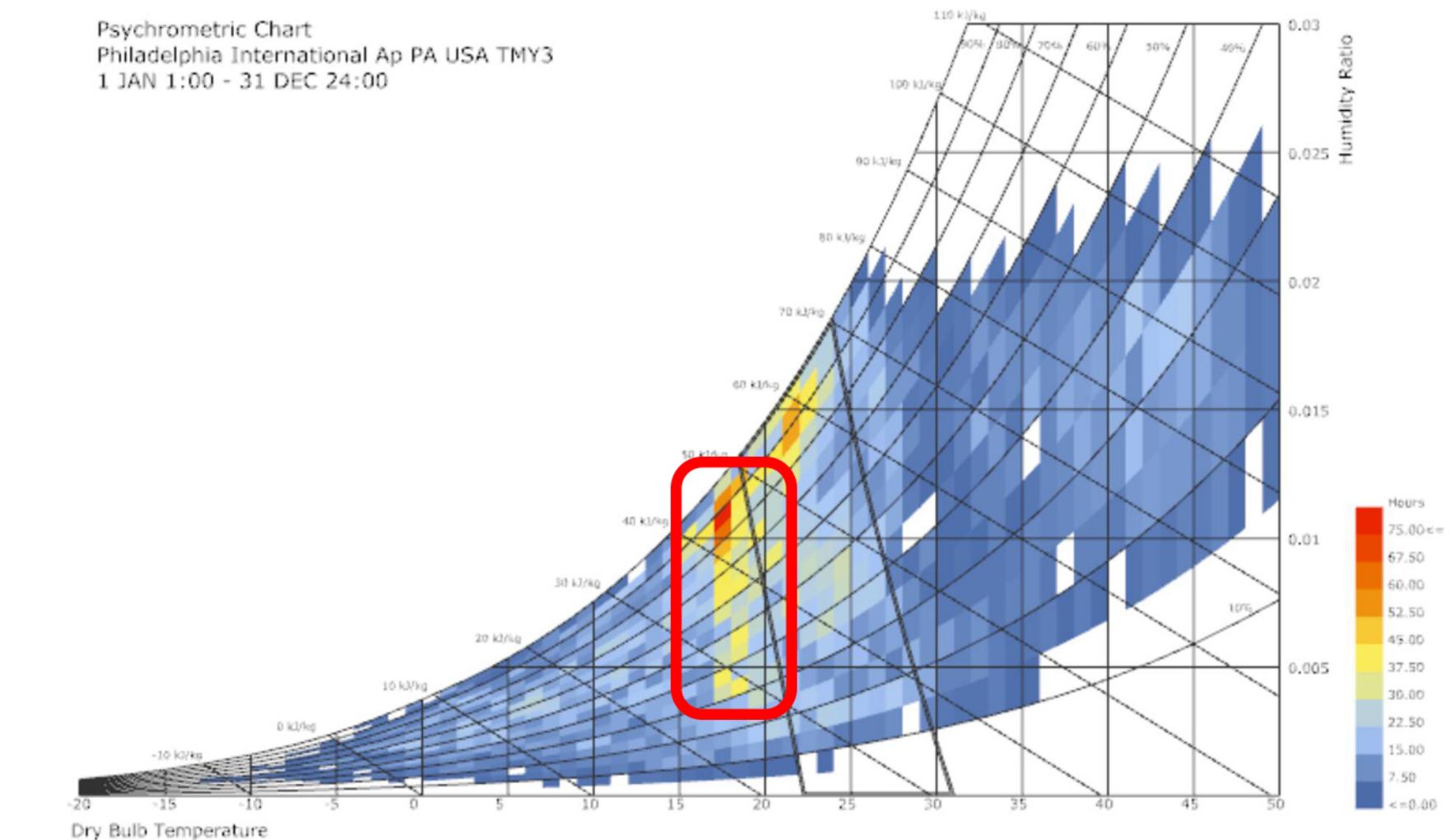


# ENERGY SIMULATION

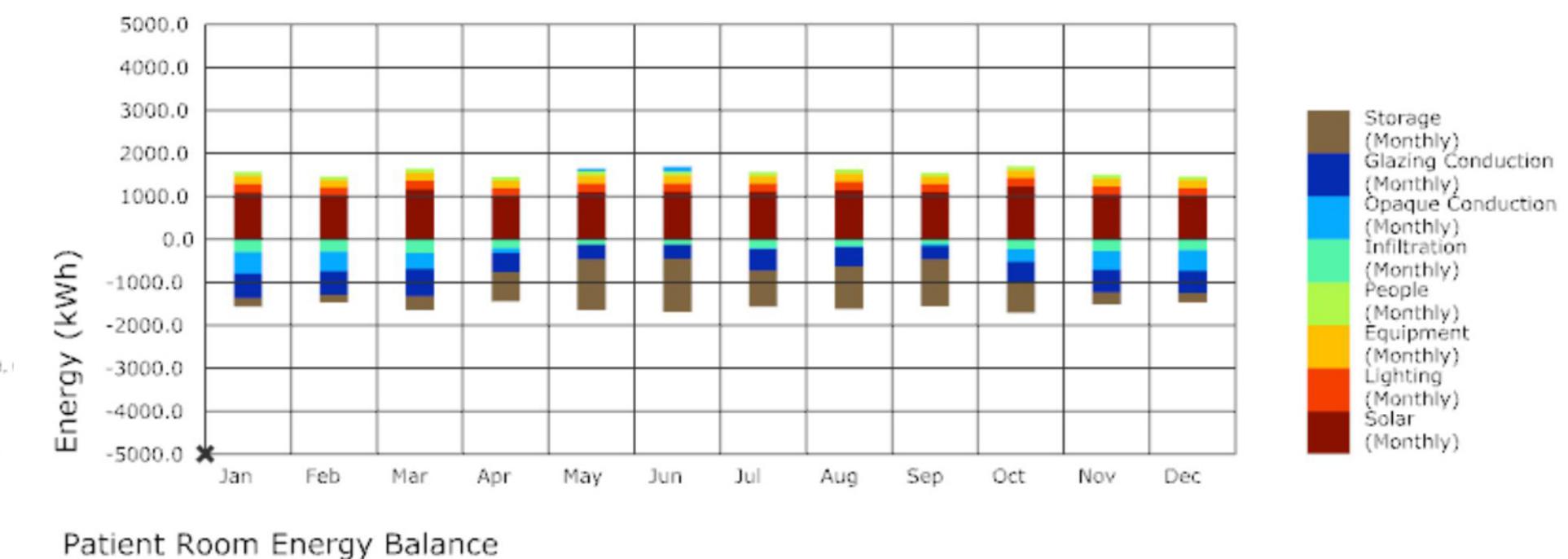
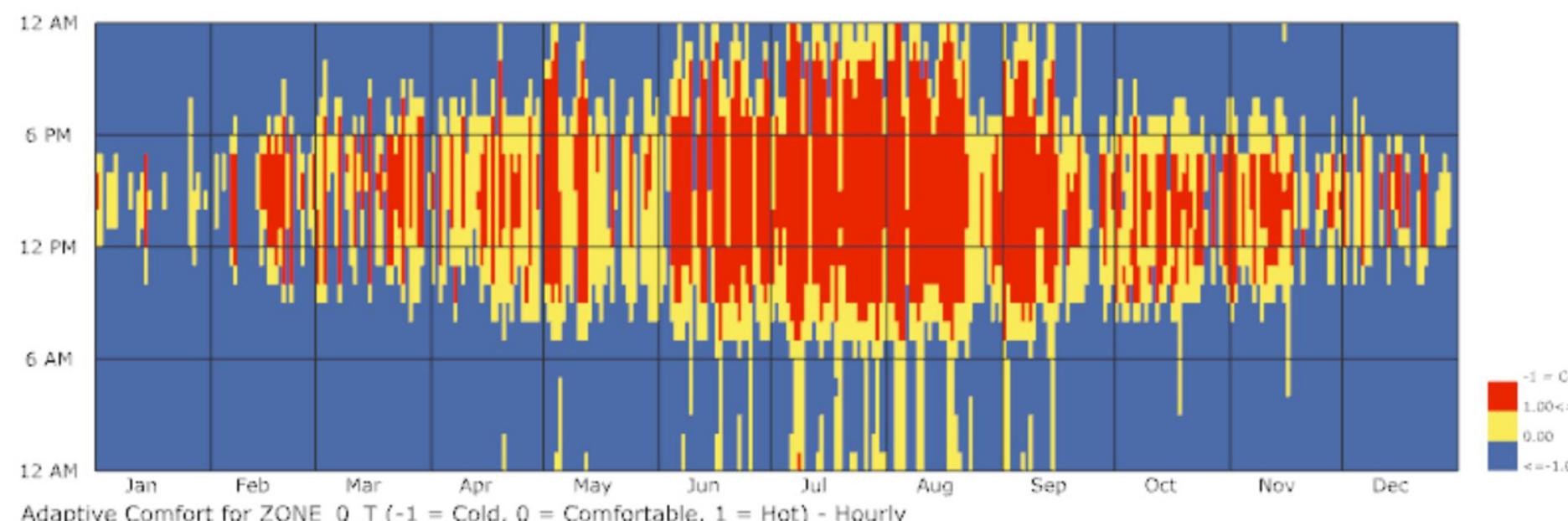
## SHENGJI TAN



Psychrometric Chart  
Philadelphia International Ap PA USA TMY3  
1 JAN 1:00 - 31 DEC 24:00

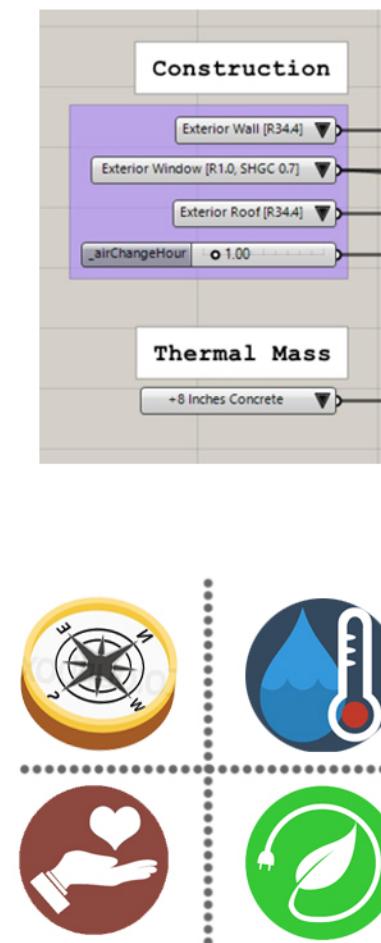
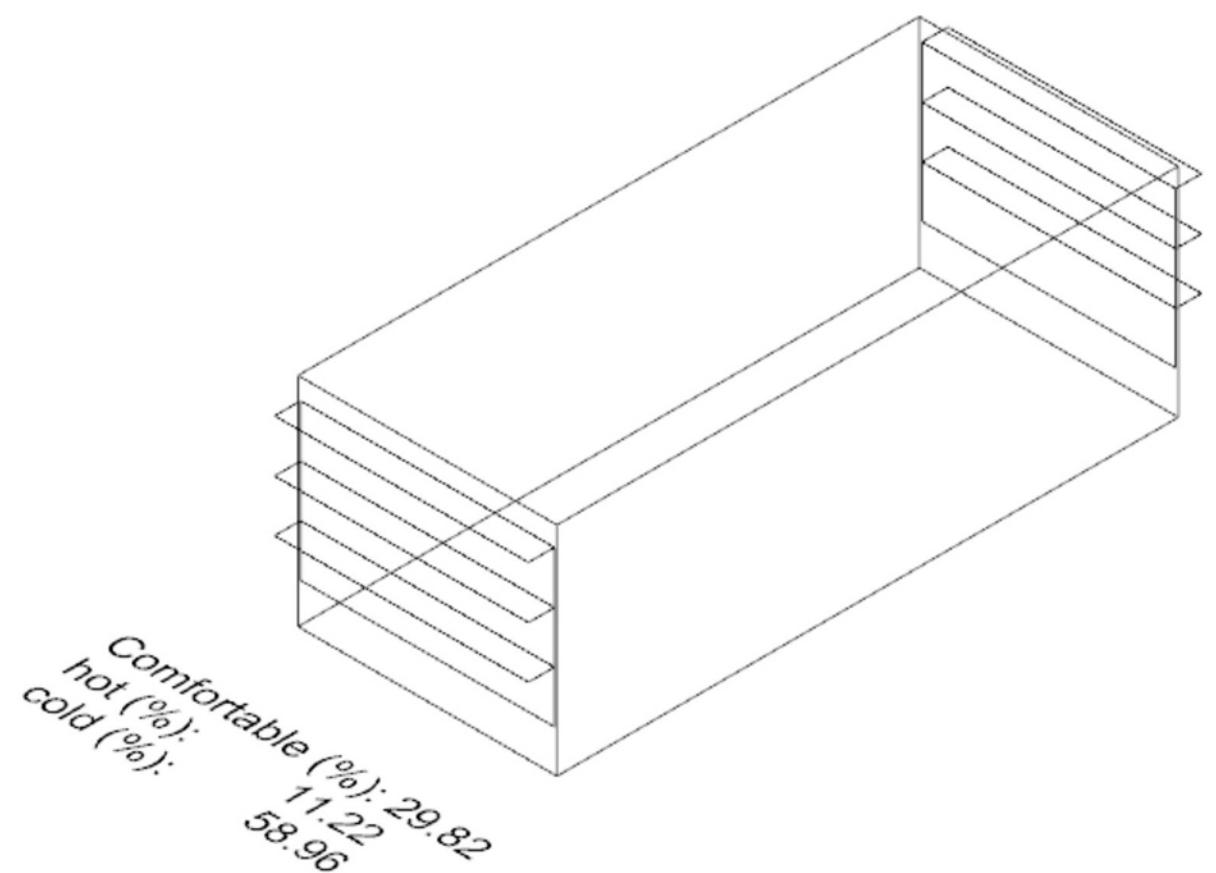


According to Psychrometric Chart: too much hours are on the low temperature level next to the comfort zone. Next sept should try to remove the openings on east and west facades in order to reduce the infiltration.

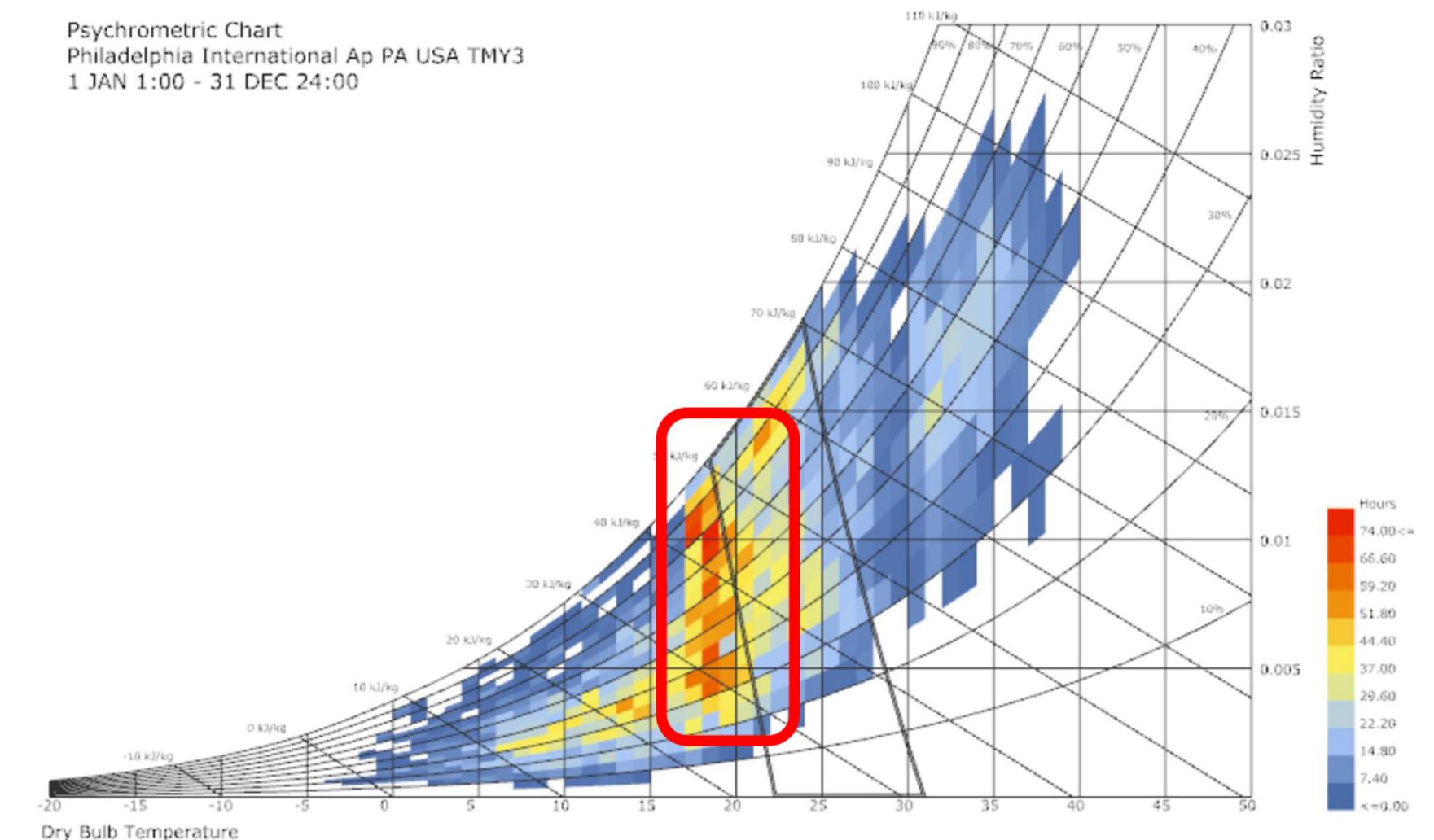


# ENERGY SIMULATION

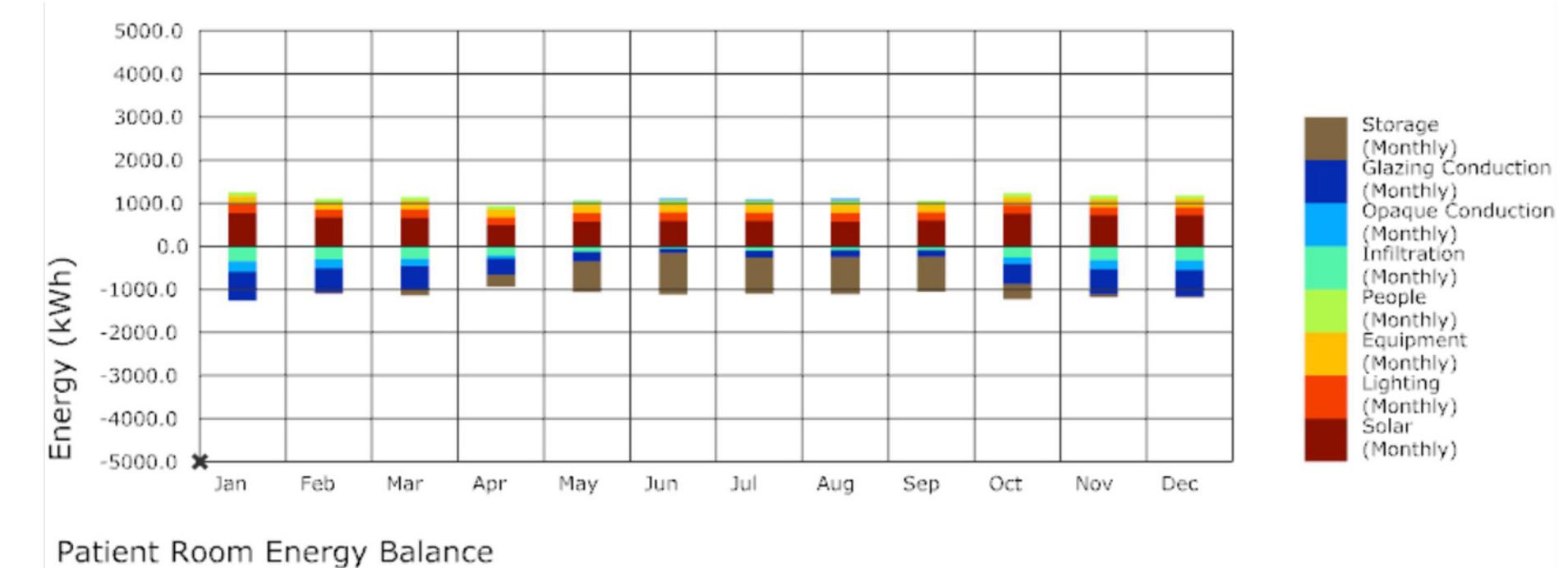
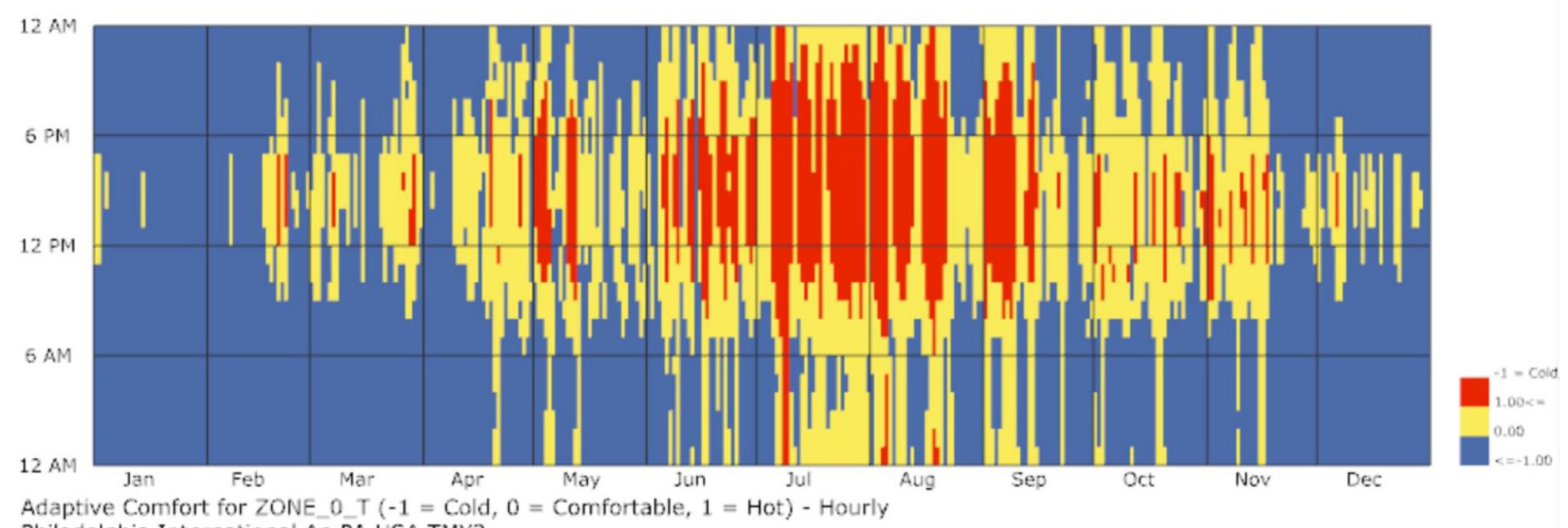
## SHENGJI TAN



Psychrometric Chart  
Philadelphia International Ap PA USA TMY3  
1 JAN 1:00 - 31 DEC 24:00

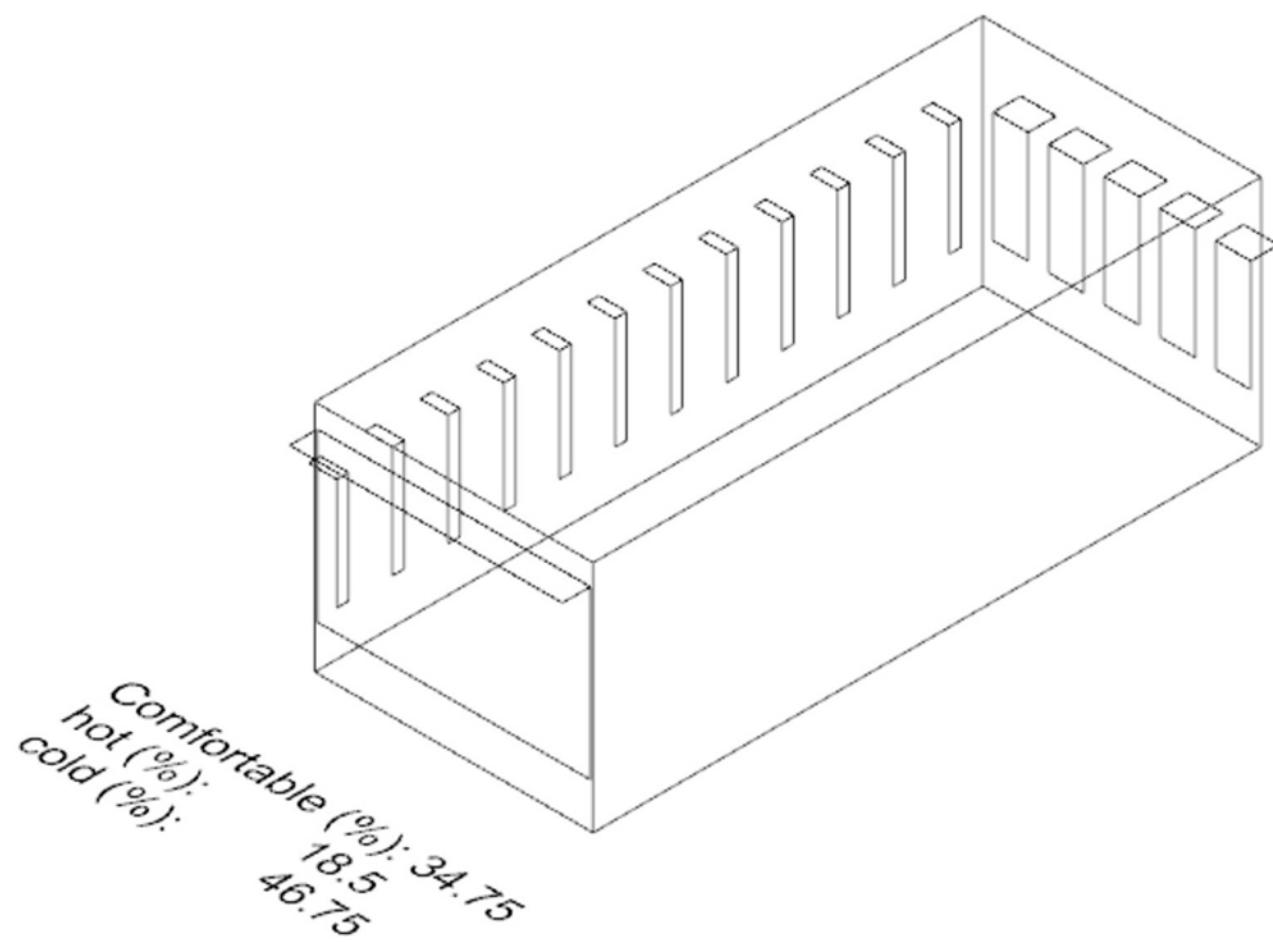


According to Psychrometric Chart: too much hours are on the low temperature level next to the comfort zone. Next sept should try to redesign the openings on west facades in order to obtain the solar radiation in afternoon which will keep the room warm in night.

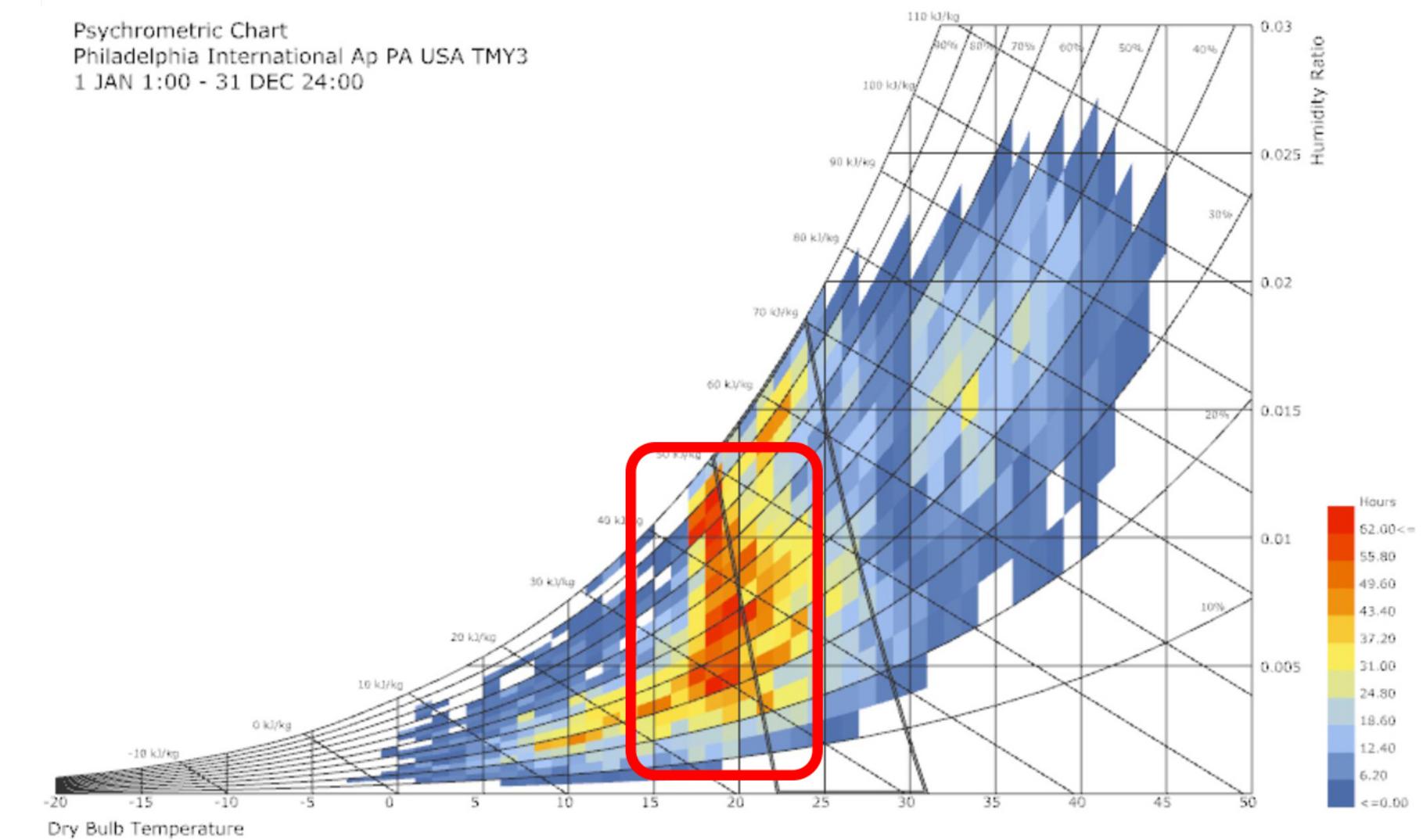


# ENERGY SIMULATION

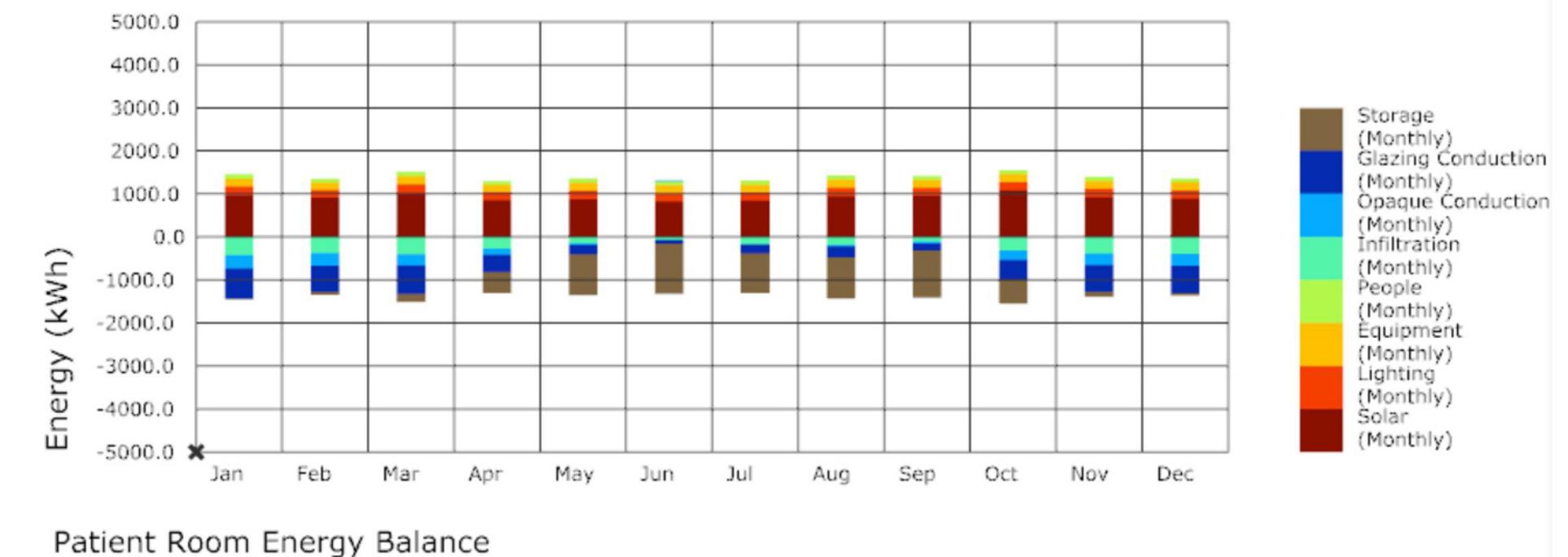
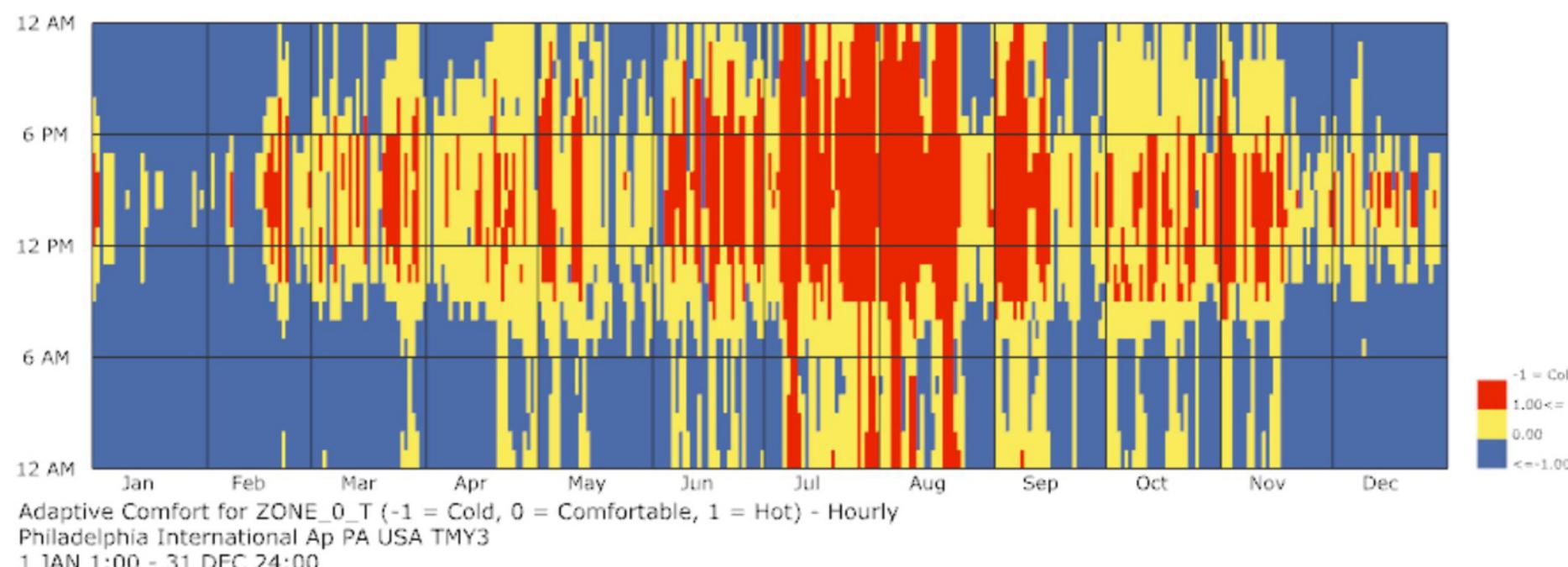
## SHENGJI TAN



Psychrometric Chart  
Philadelphia International Ap PA USA TMY3  
1 JAN 1:00 - 31 DEC 24:00

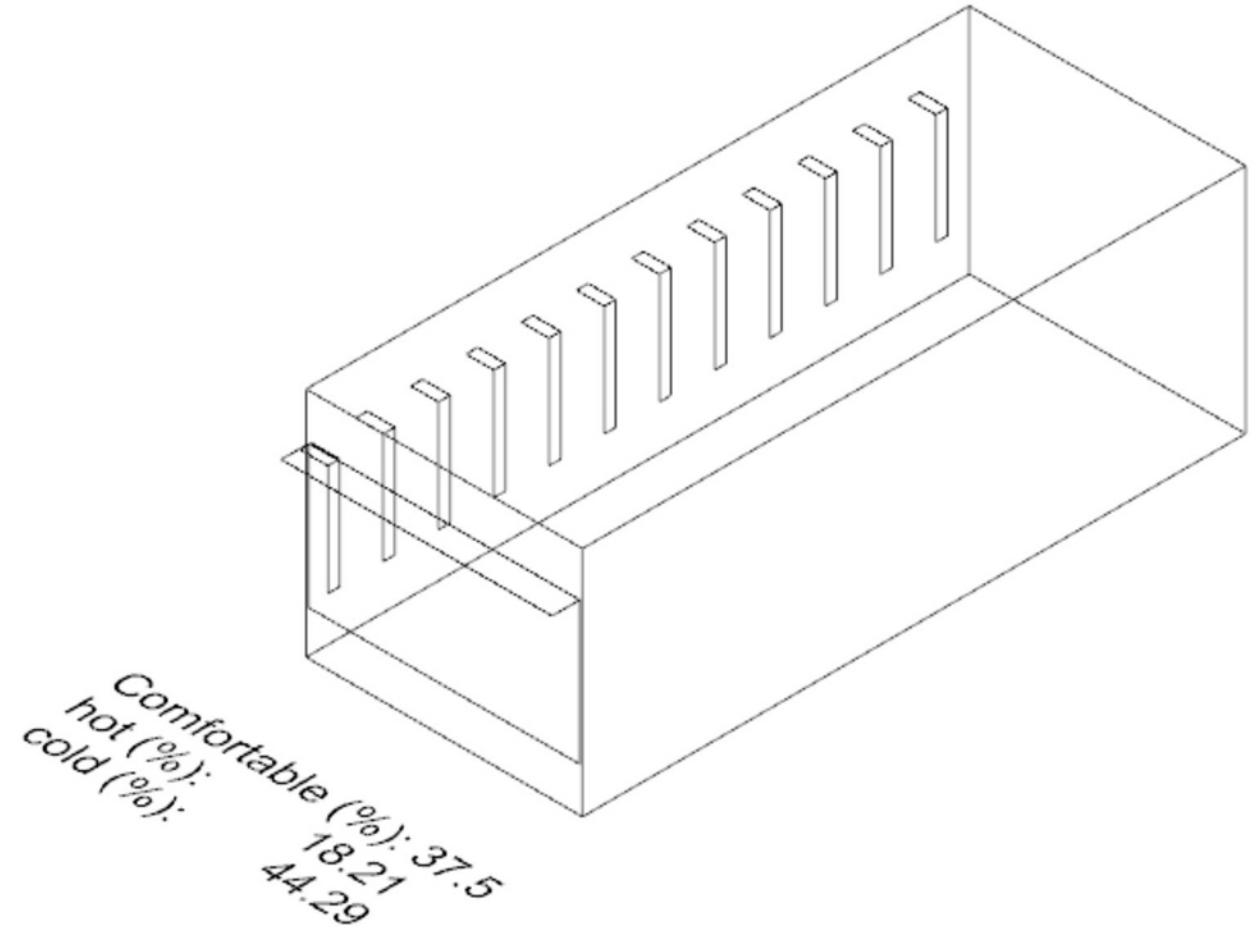


According to Psychrometric Chart: still too much hours are on the low temperature level next to the comfort zone. Next sept should try to remove the opening on north facade in order to reduce the infiltration.

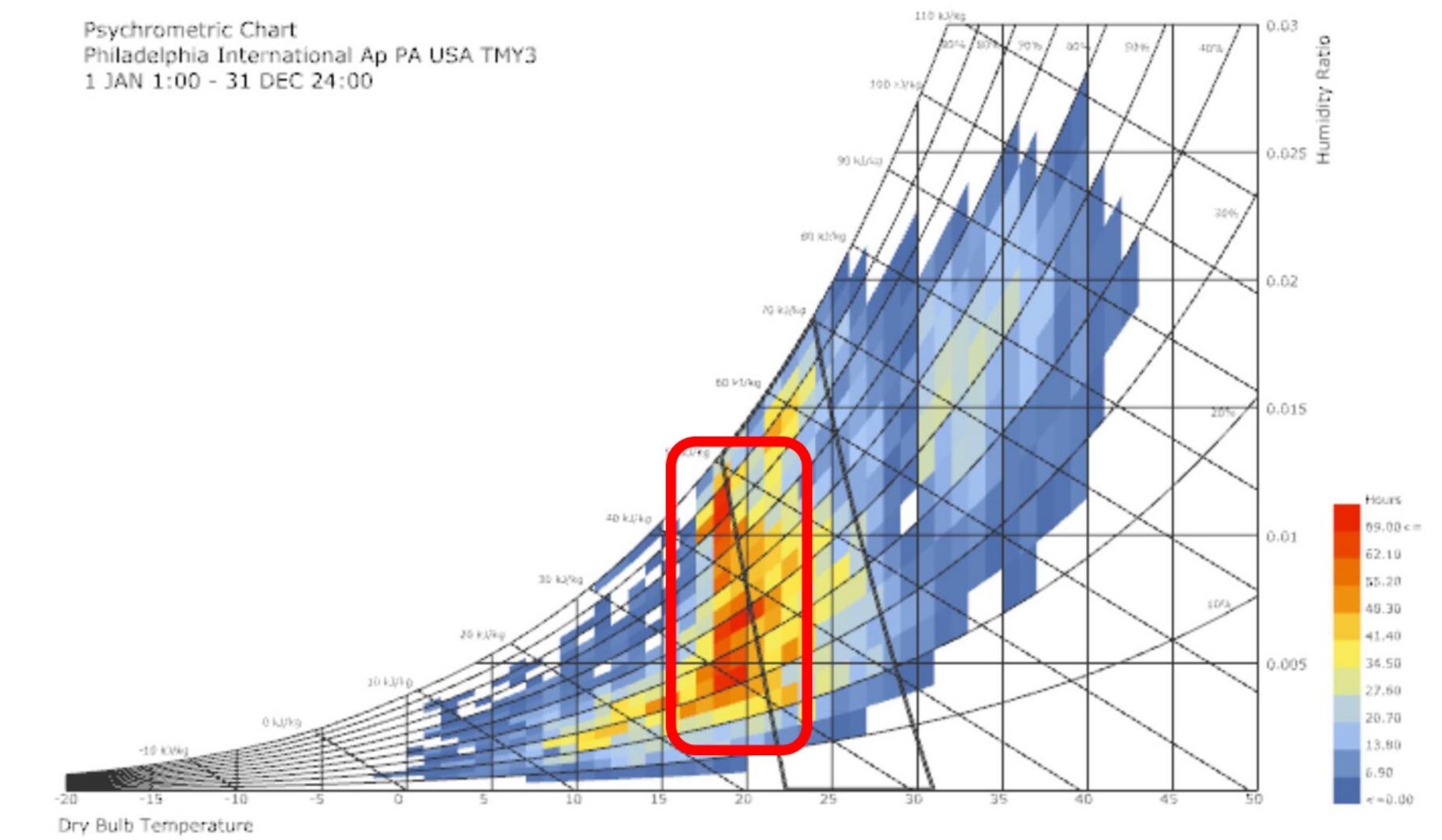


# ENERGY SIMULATION

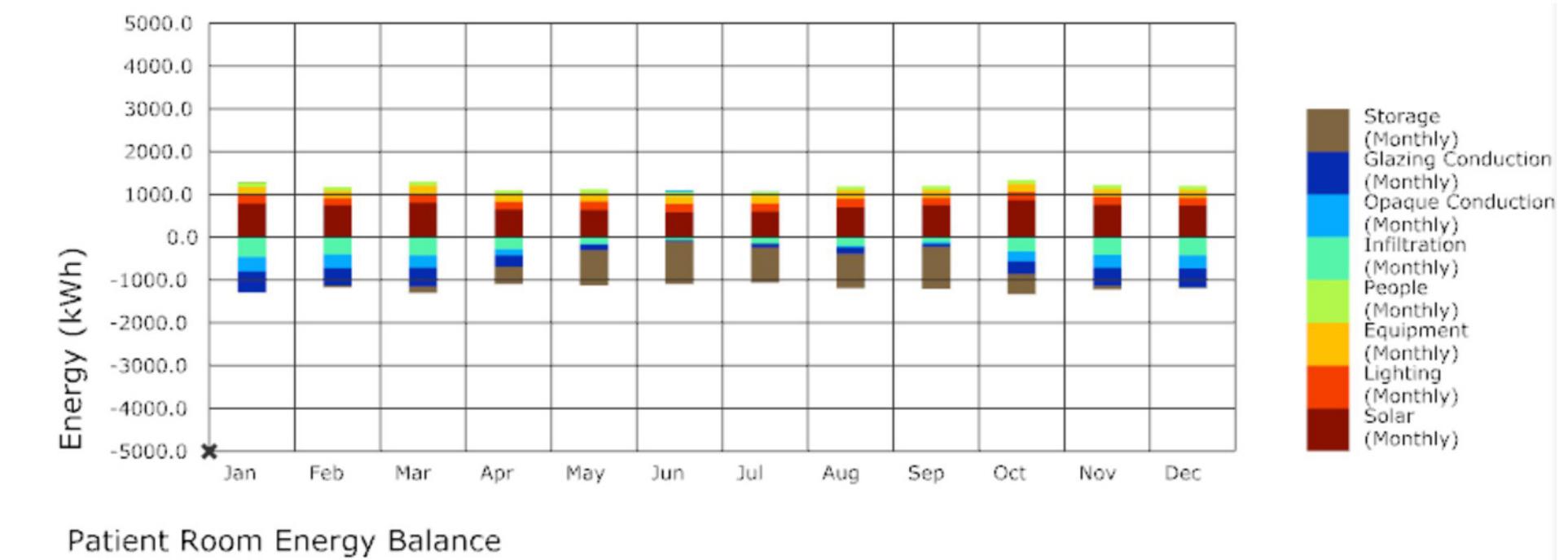
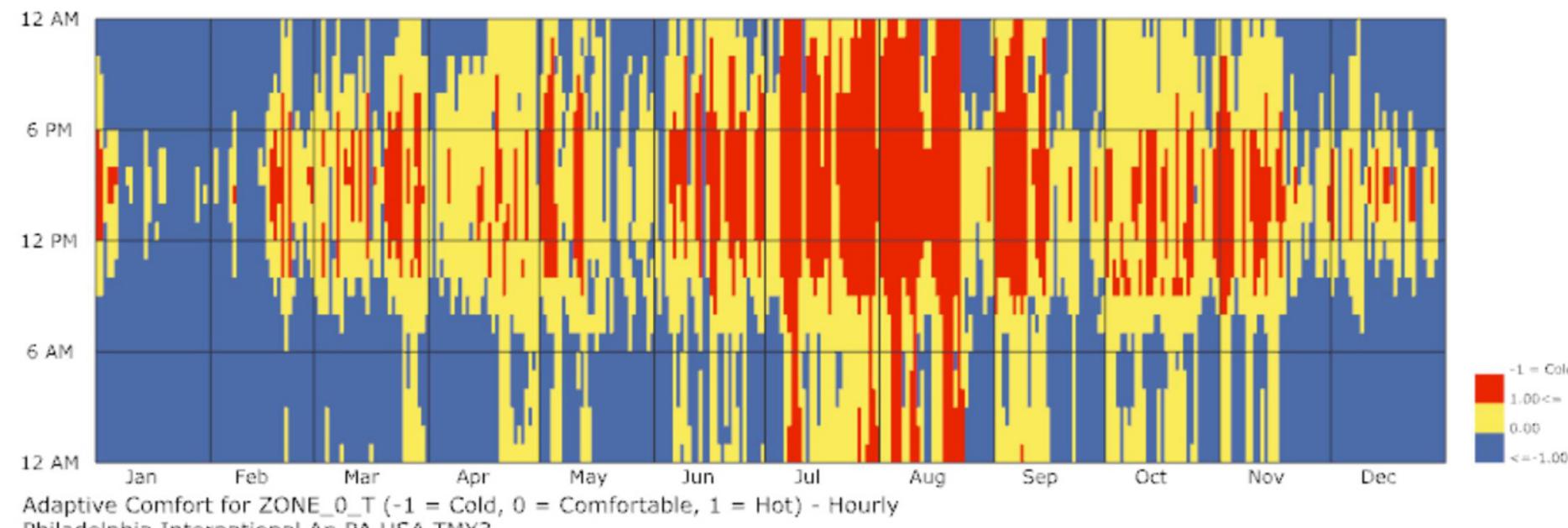
## SHENGJI TAN



Psychrometric Chart  
Philadelphia International Ap PA USA TMY3  
1 JAN 1:00 - 31 DEC 24:00

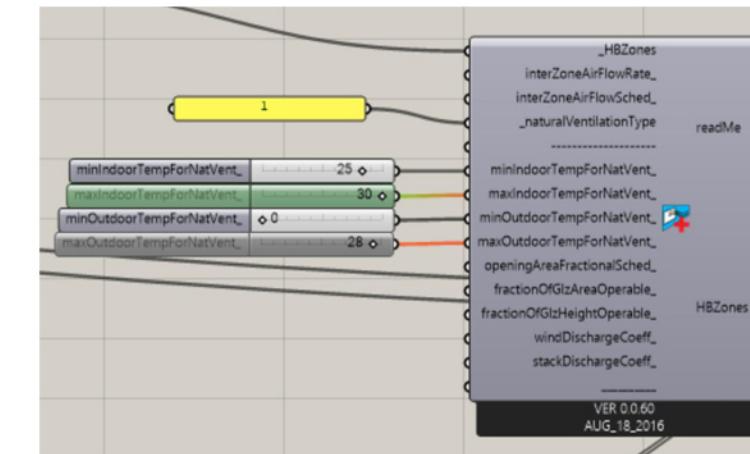
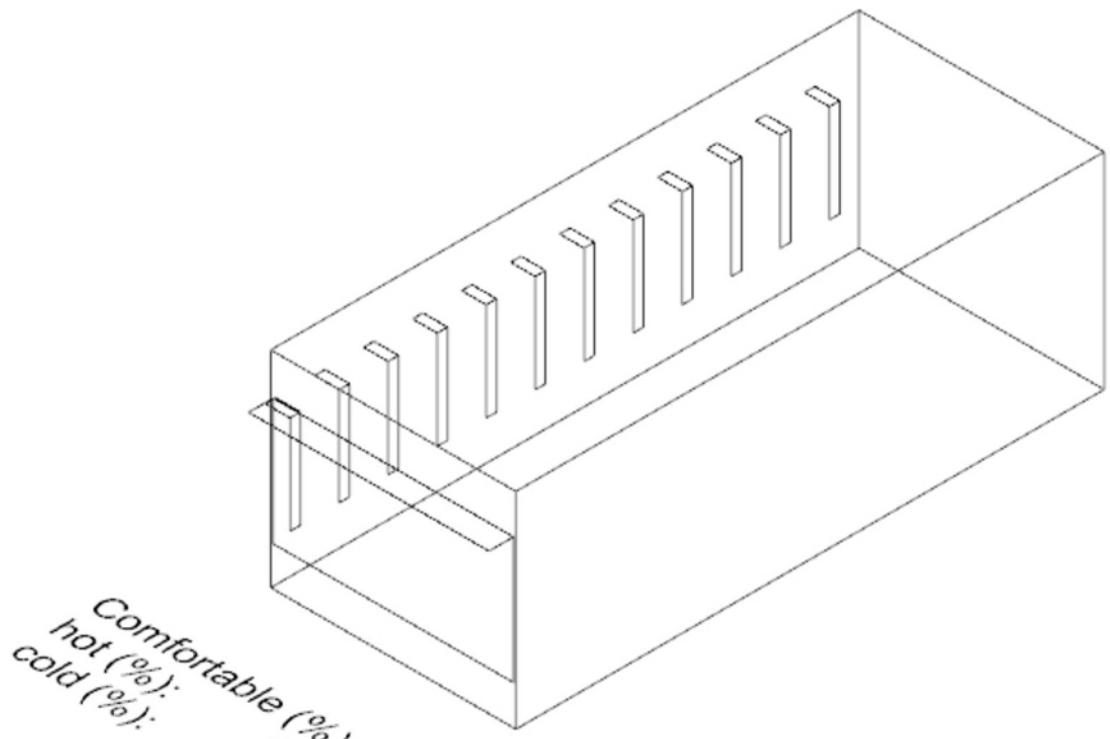


According to Psychrometric Chart: still too much hours are on the low temperature level next to the comfort zone. Next sept should try to add natural ventilation to this room. Also, try to change the construction options of the envelop.

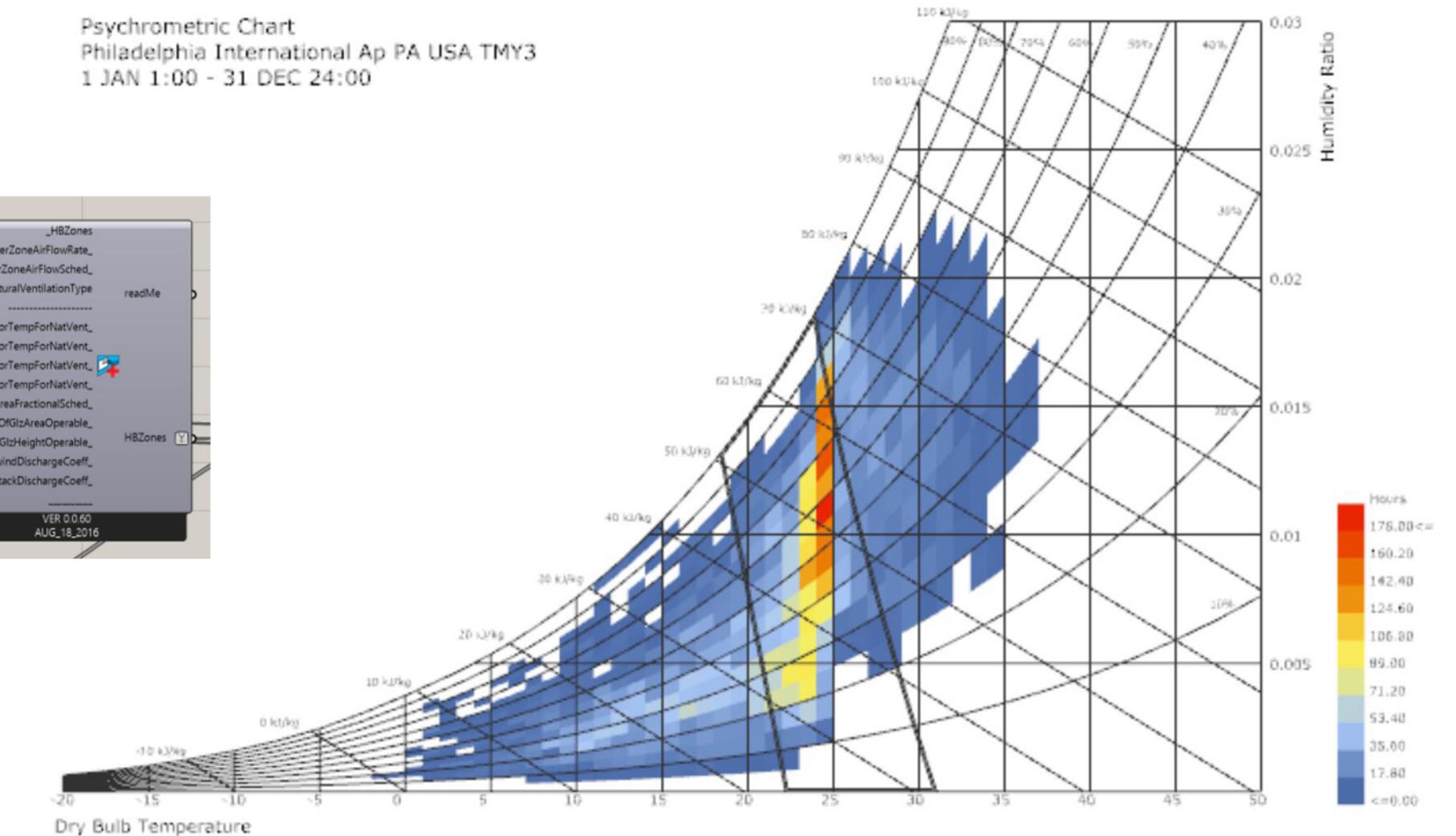


# ENERGY SIMULATION

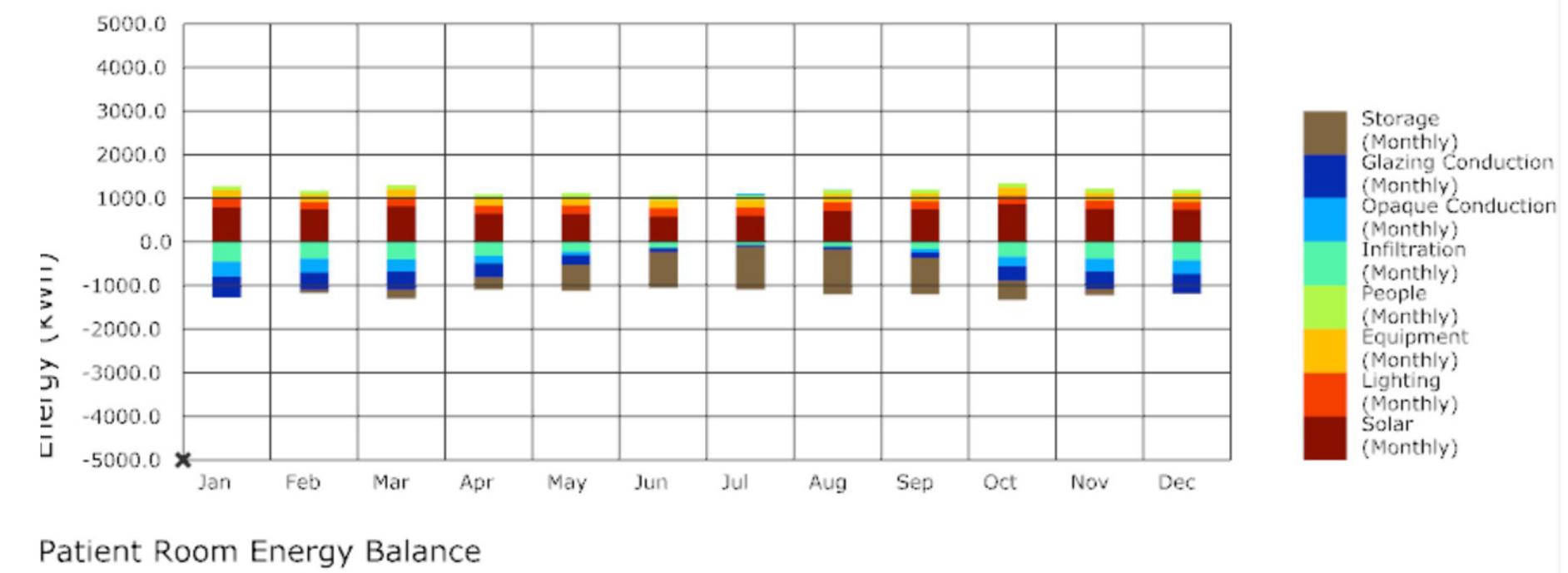
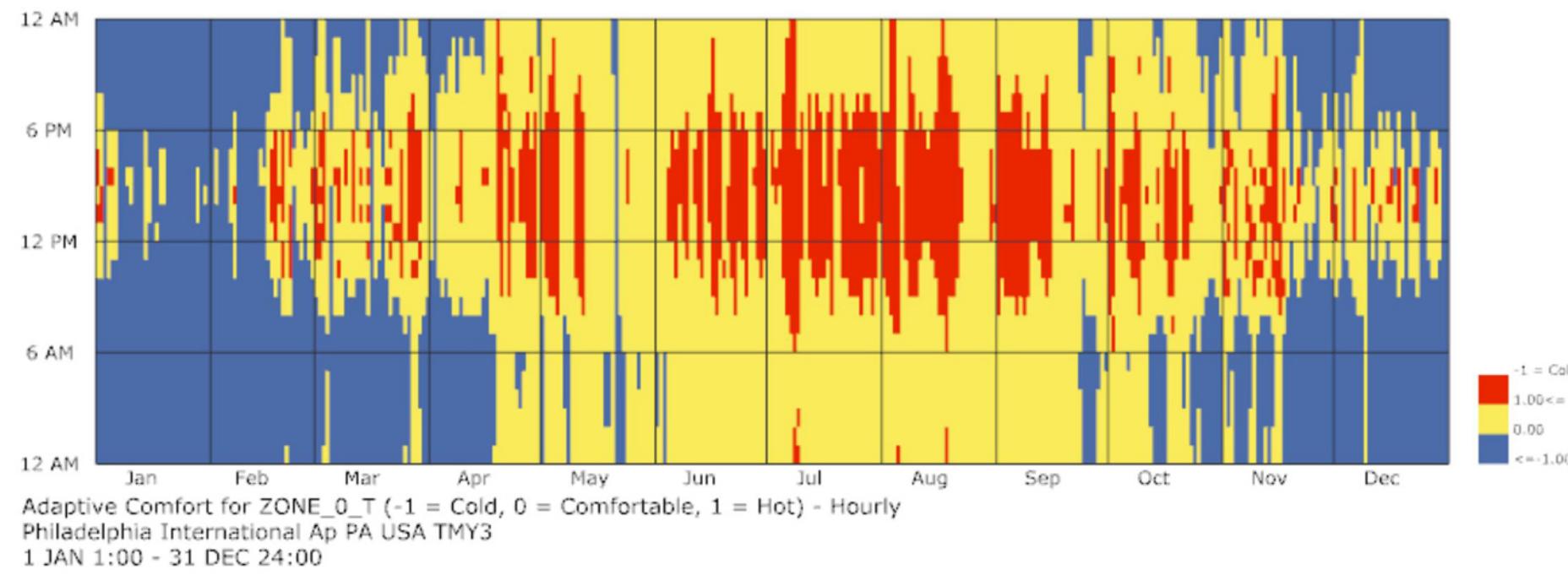
## SHENGJI TAN



Psychrometric Chart  
Philadelphia International Ap PA USA TMY3  
1 JAN 1:00 - 31 DEC 24:00

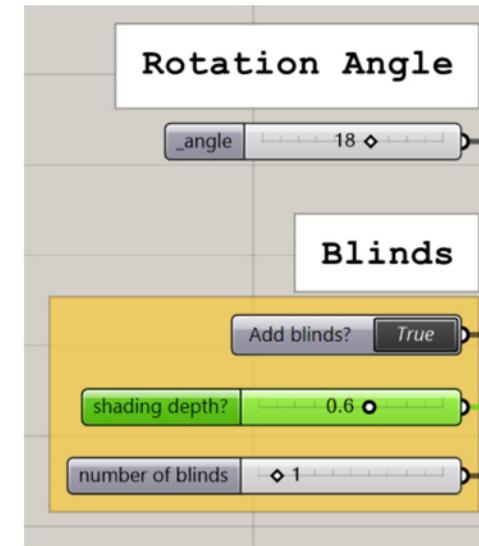
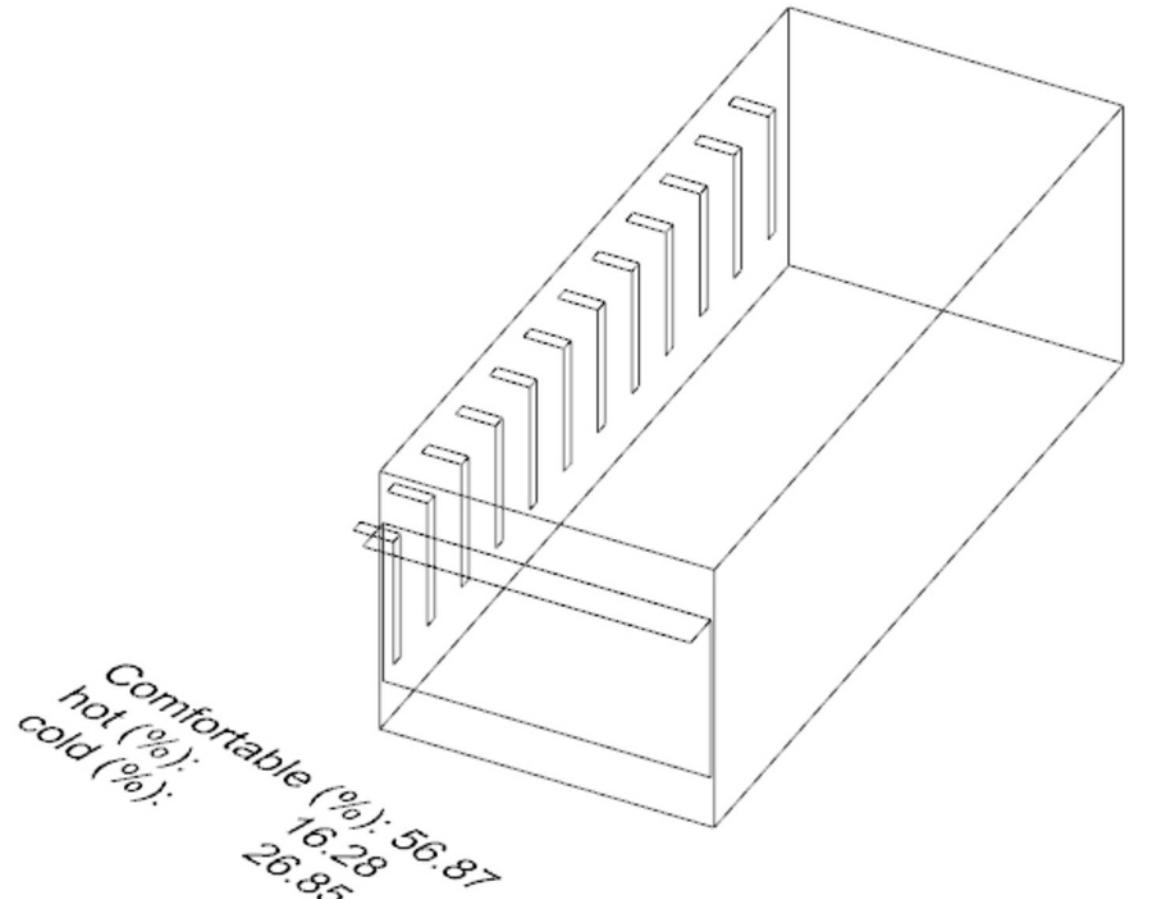


It works. Next sept will try different orientations and the depth of blinds

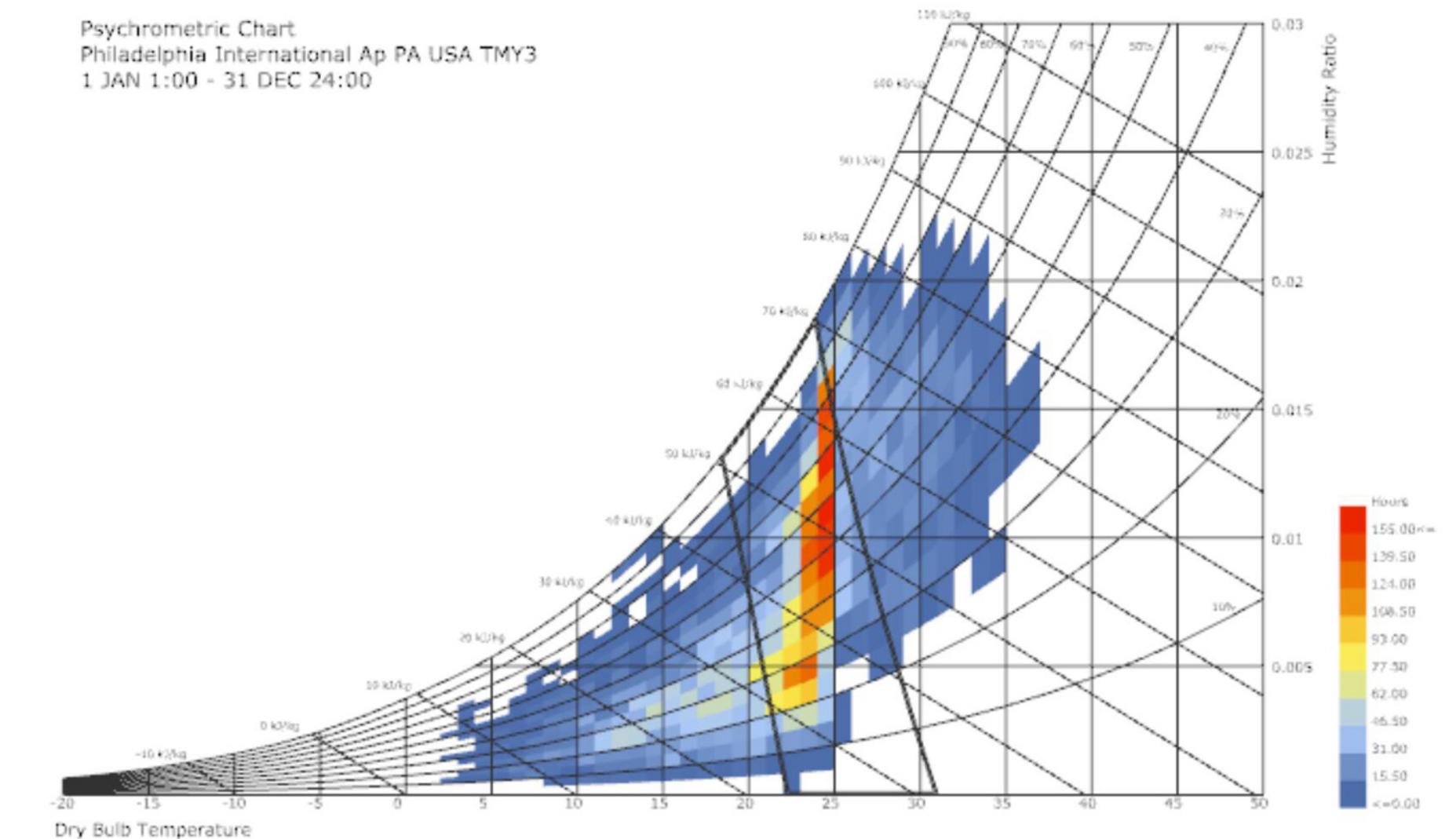


# ENERGY SIMULATION

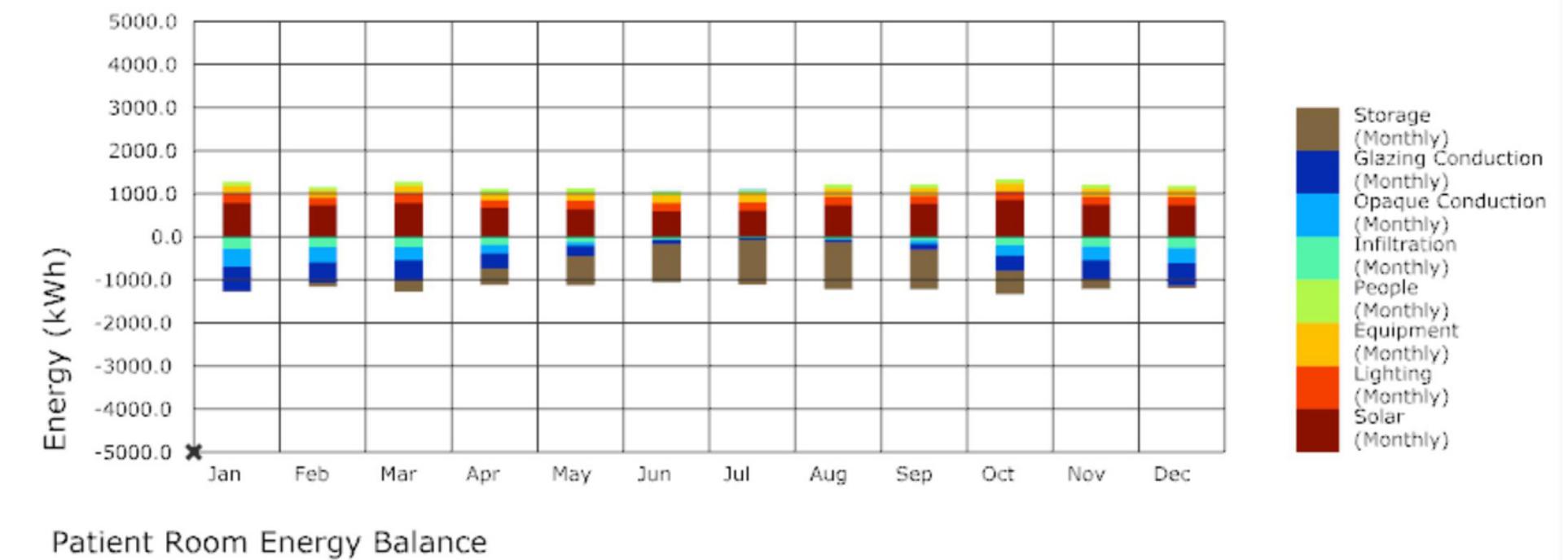
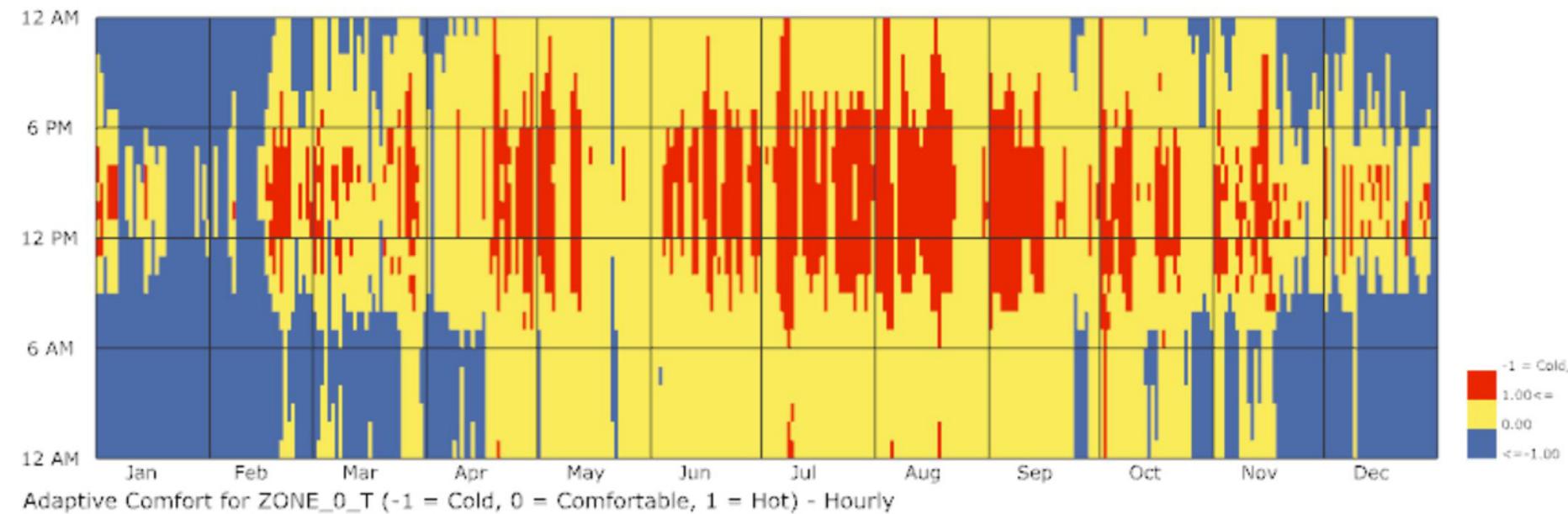
## SHENGJI TAN



Psychrometric Chart  
Philadelphia International Ap PA USA TMY3  
1 JAN 1:00 - 31 DEC 24:00

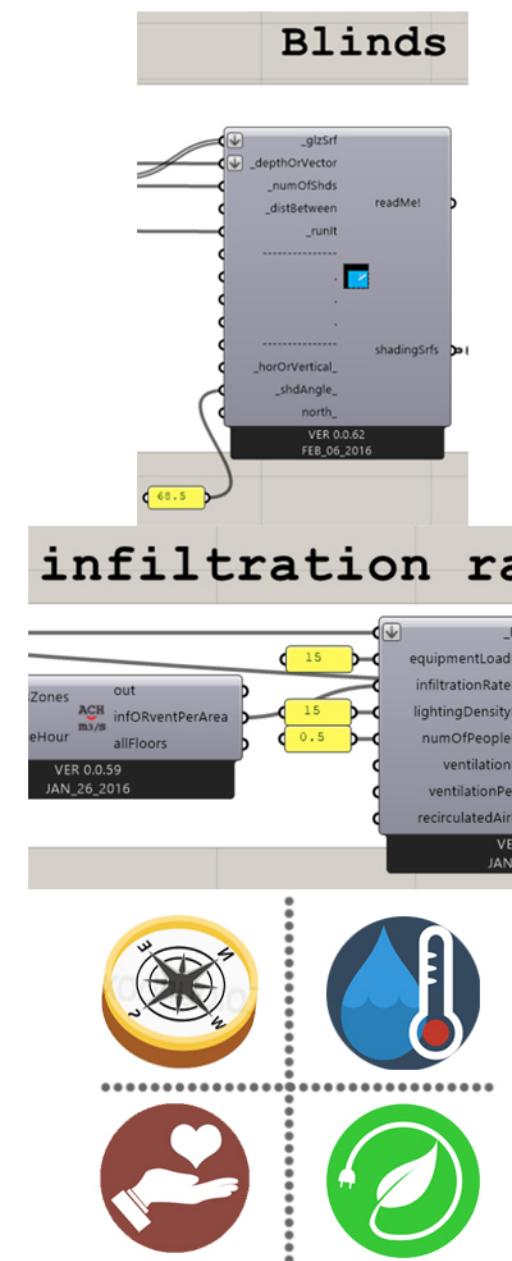
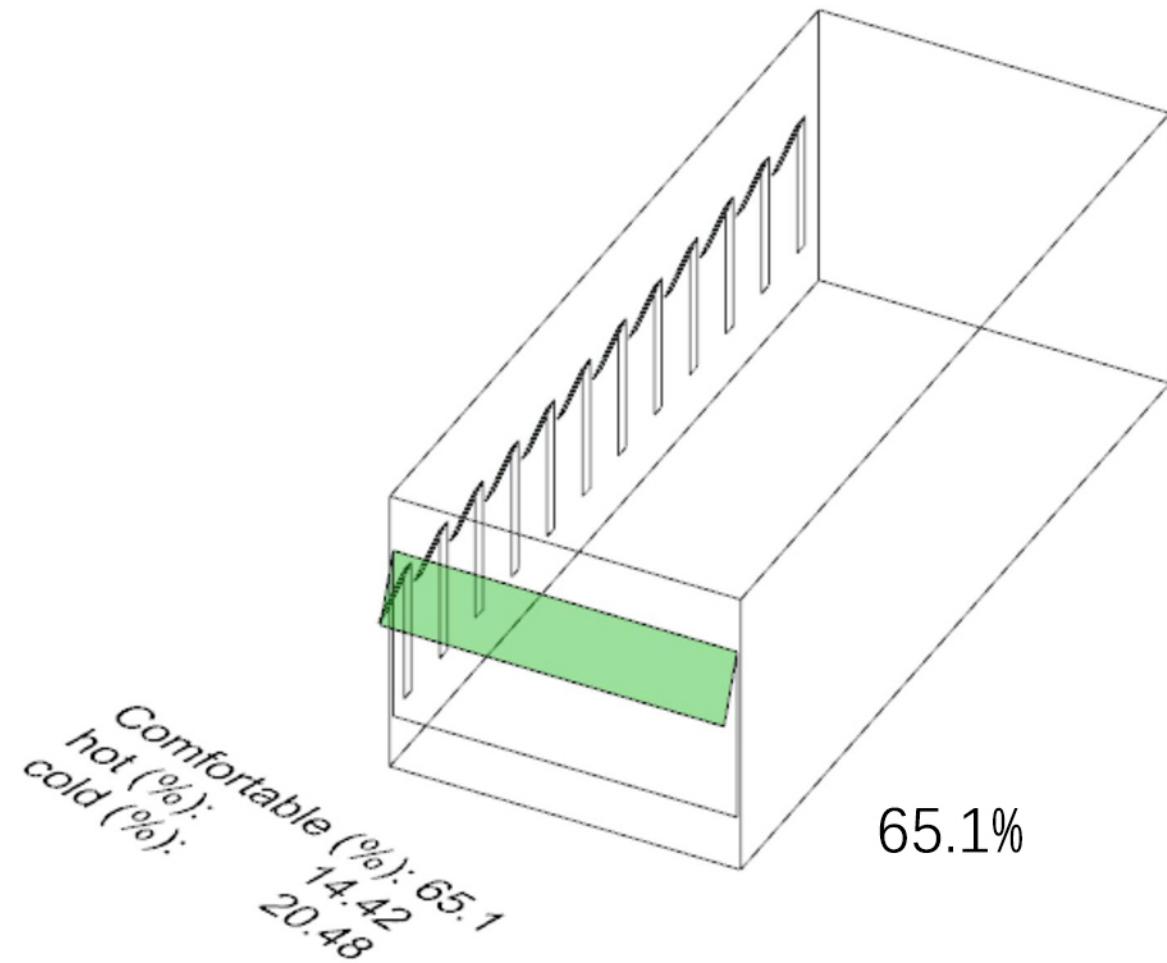


It works. Next sept will try different angles of blinds and different infiltration options to reduce to cold% time.

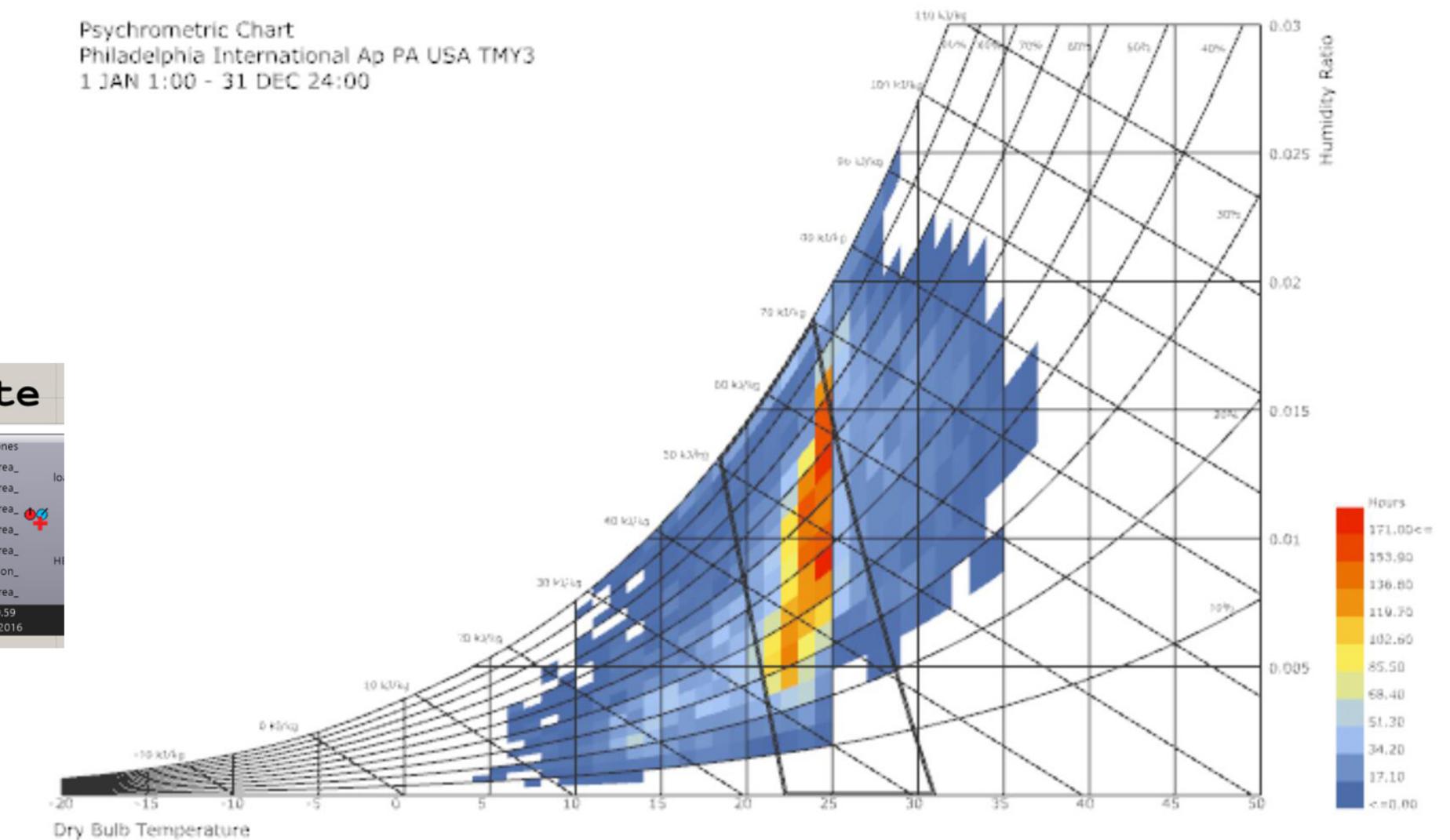


# ENERGY SIMULATION

## SHENGJI TAN



Psychrometric Chart  
Philadelphia International Ap PA USA TMY3  
1 JAN 1:00 - 31 DEC 24:00



By using a perfect angle of blinds to shade and using lights, equipment and occupants in the room can increase the percent of comfort efficiently.

