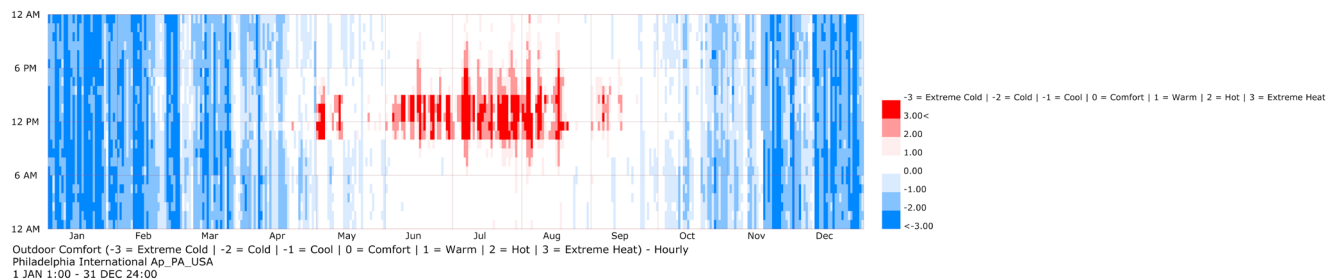
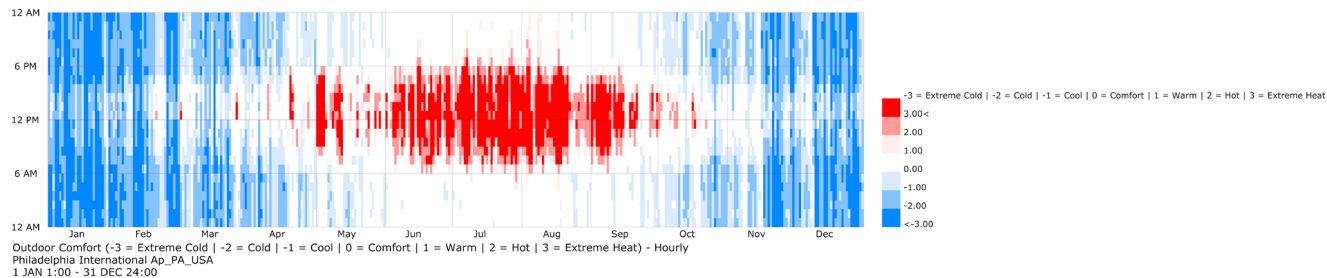
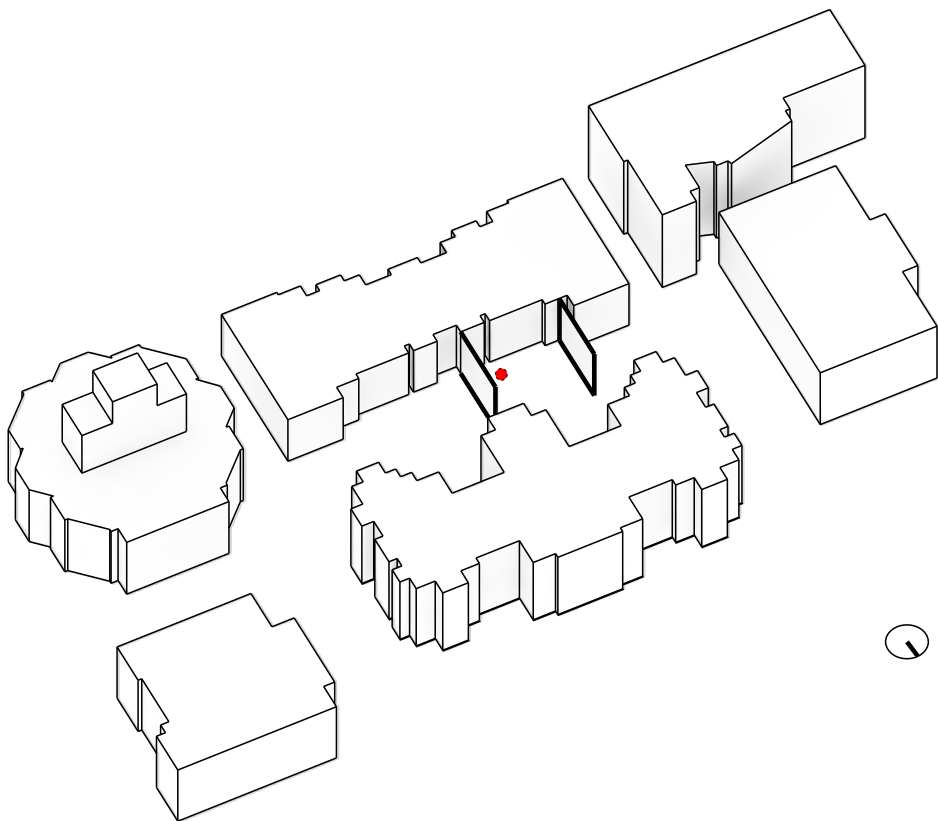


**Assignment-
03_outdoor_comfort_calculation**

Design Idea 1



Local Situation in the Context:

Global Situation in Philly:

Design Idea 1

Percent of Time Comfortable: **39.32%**

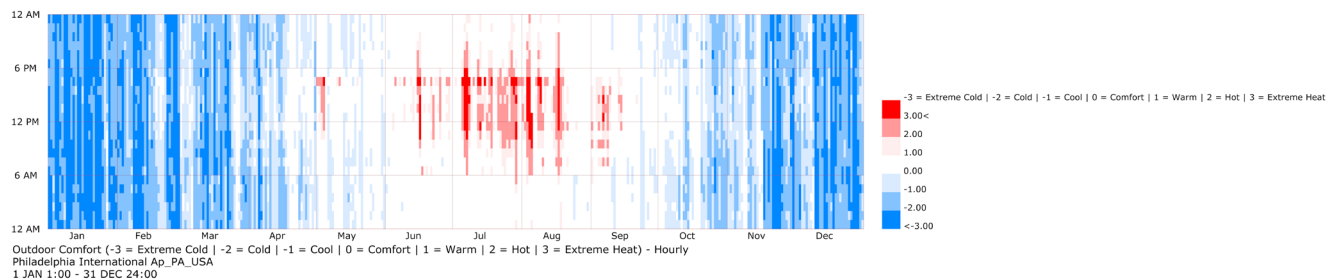
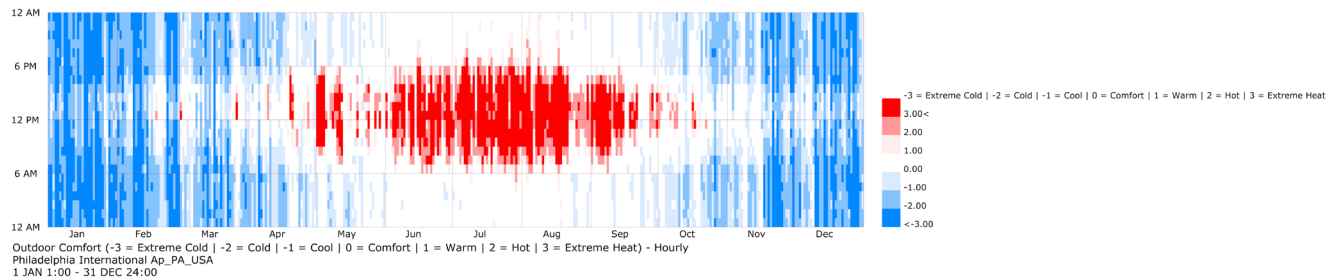
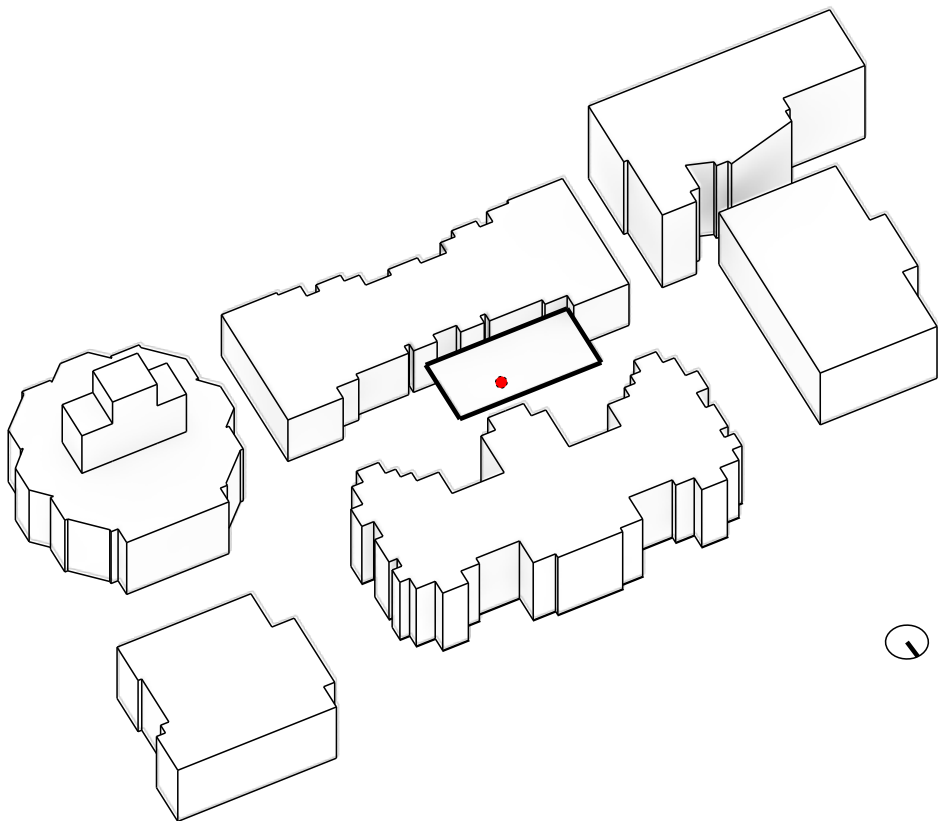
Percent Heat Stress: 5.00_w%

Percent Cold Stress: 34.98%

Percent of Time Comfortable in Philly: 37.34%

Percent Heat Stress: 12.51%

Percent Cold Stress: 31.64%



Local Situation in the Context:

Global Situation in Philly:

Design Idea 2

Percent of Time Comfortable: **40.85%**

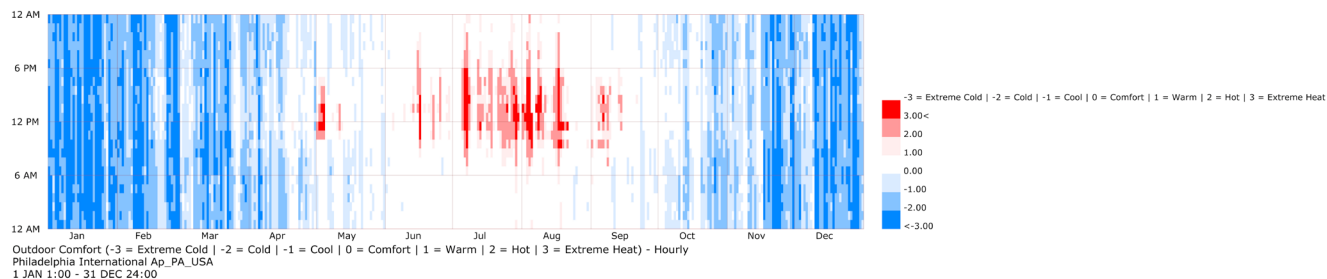
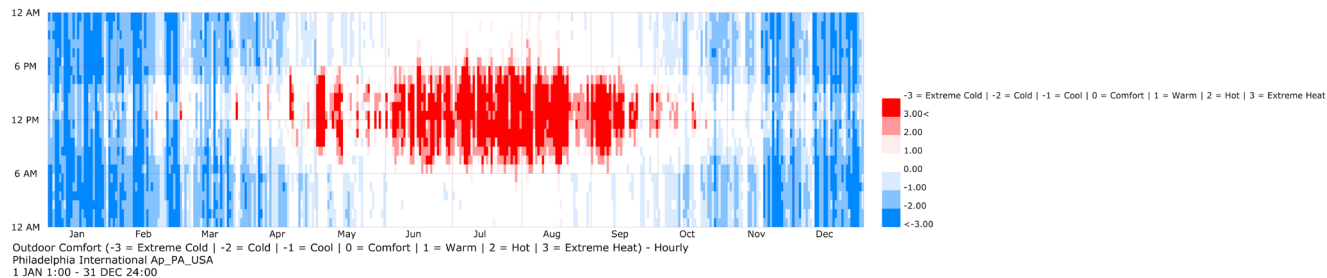
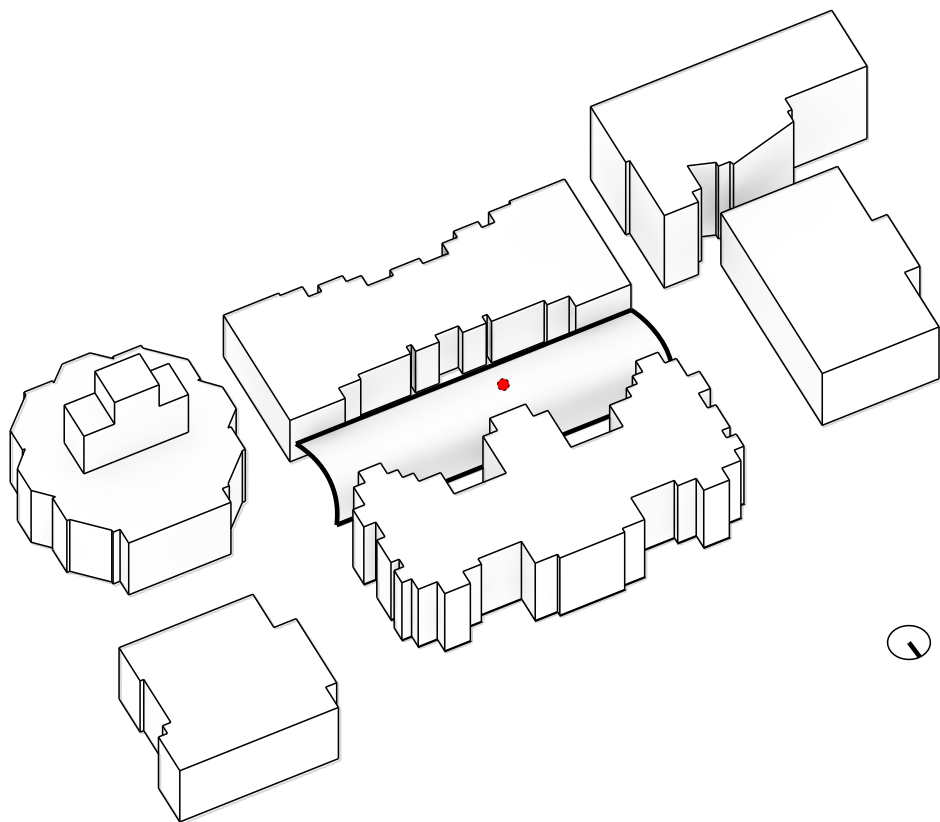
Percent Heat Stress: 3.50%

Percent Cold Stress: 34.47%

Percent of Time Comfortable in Philly: 37.34%

Percent Heat Stress: 12.51%

Percent Cold Stress: 31.64%



Local Situation in the Context:

Global Situation in Philly:

Design Idea 3

Percent of Time Comfortable: **41.06%**

Percent Heat Stress: 3.59%

Percent Cold Stress: 34.31%

Percent of Time Comfortable in Philly: 37.34%

Percent Heat Stress: 12.51%

Percent Cold Stress: 31.64%

Summary

The highest possible percentage of comfortable hours that I can achieve with passive design strategies is 41.06%. It is not even close to 100%. The shading strategies only provide roughly 4% more of the percentage of comfortable hours compared to the global situation in Philly. However, adding shades does greatly lower the percentage of the heat stress.