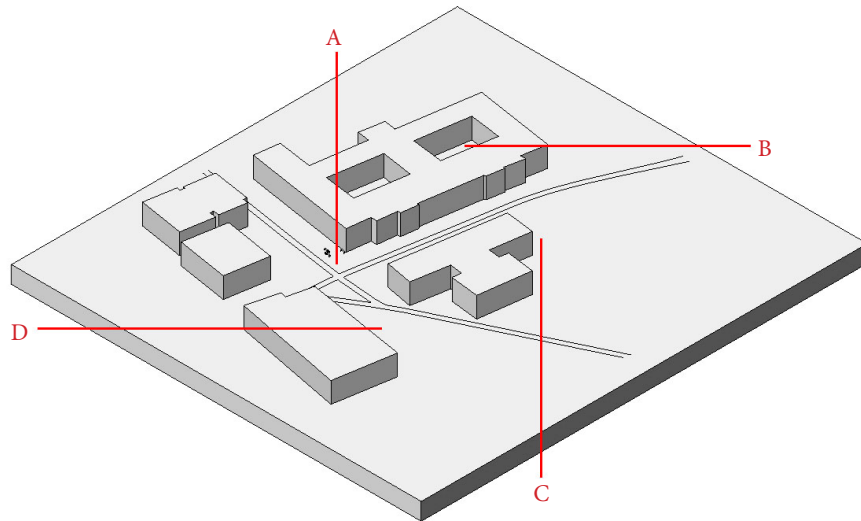
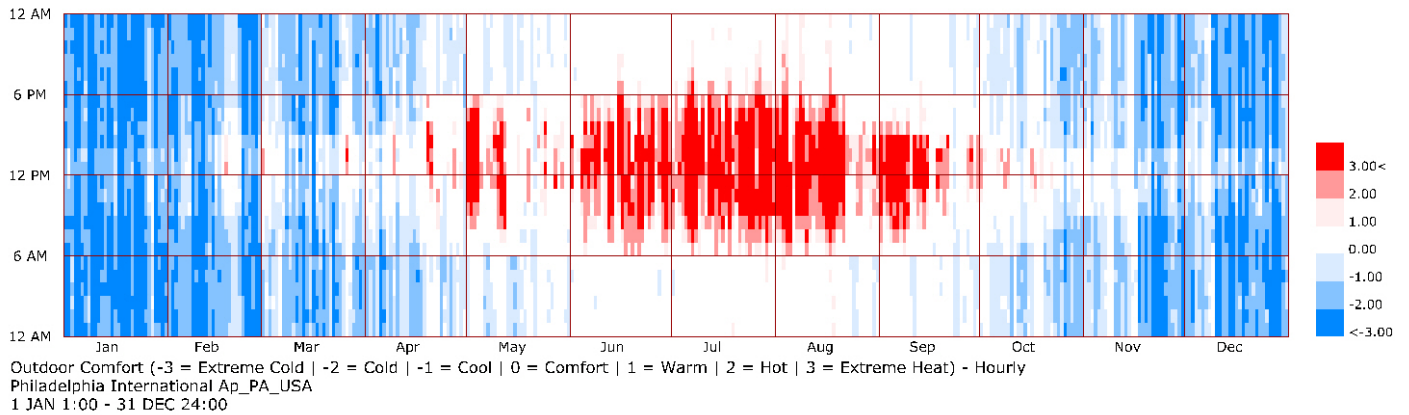


Annual Outdoor Comfort

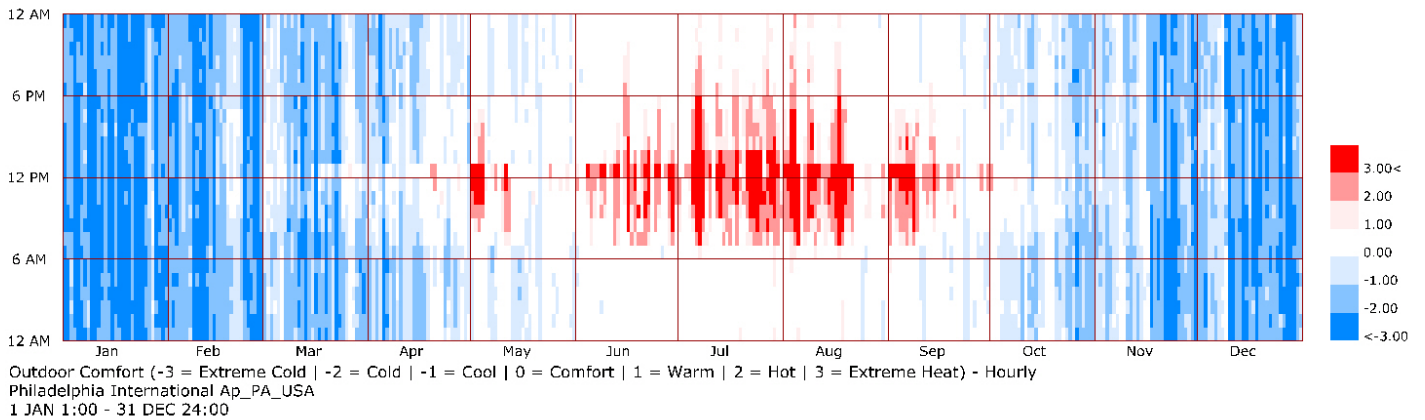
Location: School of Engineering, Southwest Corner



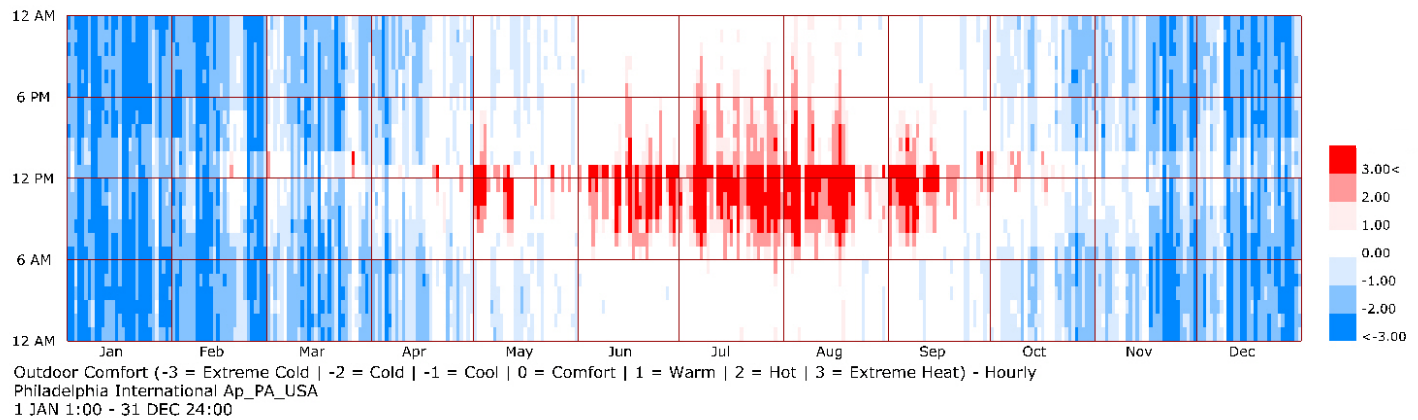
Location A: Percent Outdoor Comfort: 37.1



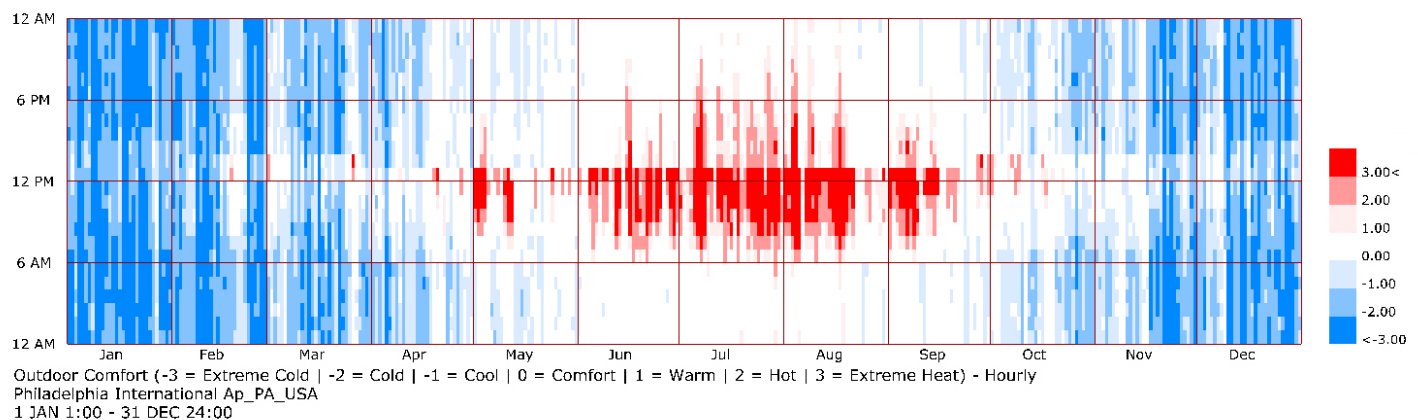
Location B: Percent Outdoor Comfort: 39.2



Location C: Percent Outdoor Comfort: 40.8



Location D: Percent Outdoor Comfort: 40.6



Most Comfortable Location: C

Least Comfortable Location: A

1) What was your thinking process to find the best location?

I first tested the most exposed area, unshielded by buildings and open exposure to the sun from the west. This area had extreme comfort conditions during the summer. As a result, I began to test areas more shielded from the west by buildings. The results have little variance but most comfortable location is that shielded from the west but open to the east.

2) What is the difference between the best and worst locations?

The worst location is open to radiation from the sun primarily from the west. The best location shields the radiation from the west but is open to the plaza on the east. As extreme conditions negatively impact the comfort level, I assume that the radiation from the west is too problematic during the summer months, bringing down the comfort level, while the radiation from the east is more pleasant.

3) What are the effective parameters that make the best location perform better than other spots?

Open to radiation from the east, shielded from the west.

4) What are the main limitations of the current simulation for your study?

The script, as it utilizes the general .epw weather file from the Philadelphia International Airport, does not take into account the specific conditions of the location such as local temperature, wind tunnels, material of surfaces, etc. For example, location A is a passageway between buildings that can channel wind. This might drive down the summer temperatures and change the result of the comfort level.