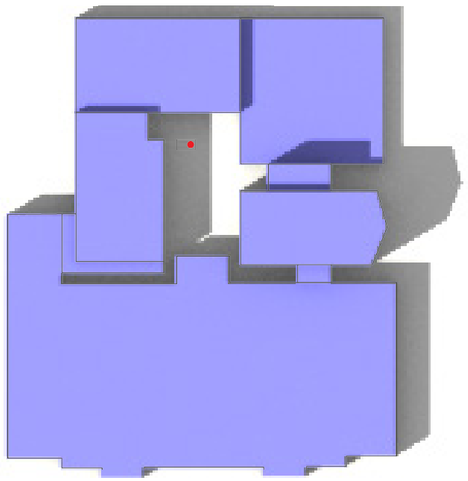
QUAIN COURTYARD

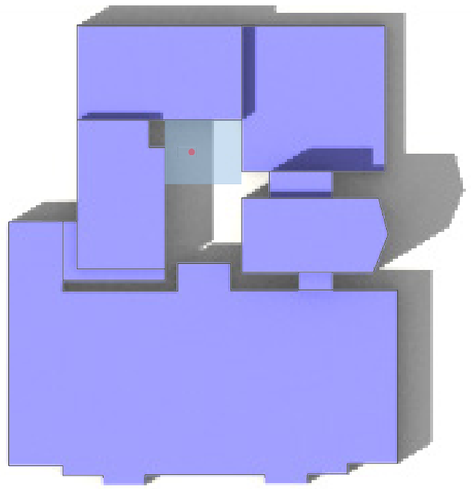
OUTDOOR COMFORT MAP

TACTIC: NONE



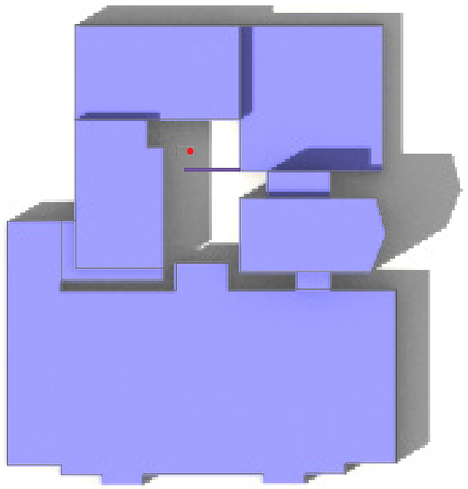
PERCENTAGE OF COMFORTABLE HOURS:
37.34
PERCENTAGE COMFORTABLE SHORT PERIOD:
18.50
HEAT STRESS:
12.51
COLD STRESS:
31.64

TACTIC: SUN SHADE



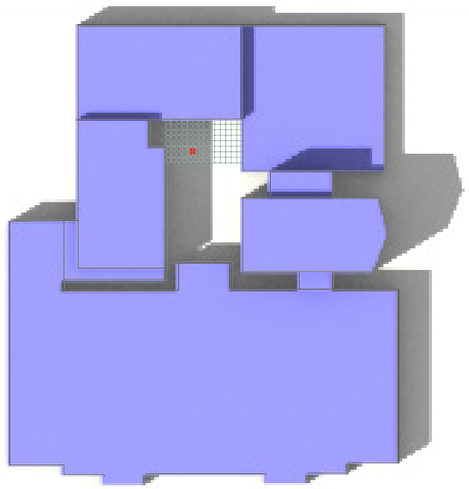
PERCENTAGE OF COMFORTABLE HOURS:
37.52
PERCENTAGE COMFORTABLE SHORT PERIOD:
18.56
HEAT STRESS:
12.11
COLD STRESS:
31.80

TACTIC: WIND WALL

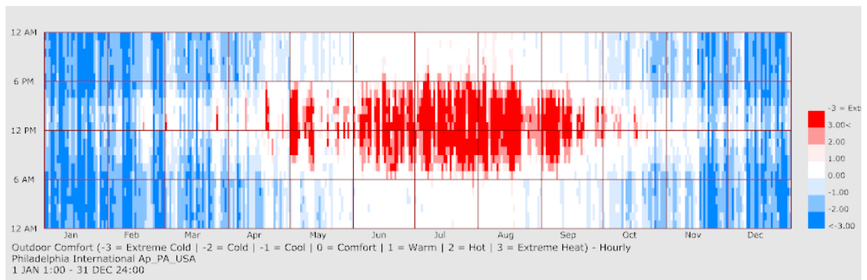


PERCENTAGE OF COMFORTABLE HOURS:
37.39
PERCENTAGE COMFORTABLE SHORT PERIOD:
18.41
HEAT STRESS:
12.39
COLD STRESS:
31.79

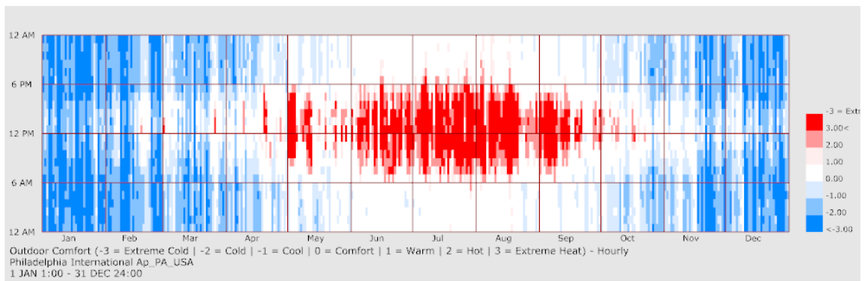
TACTIC: TRELLIS



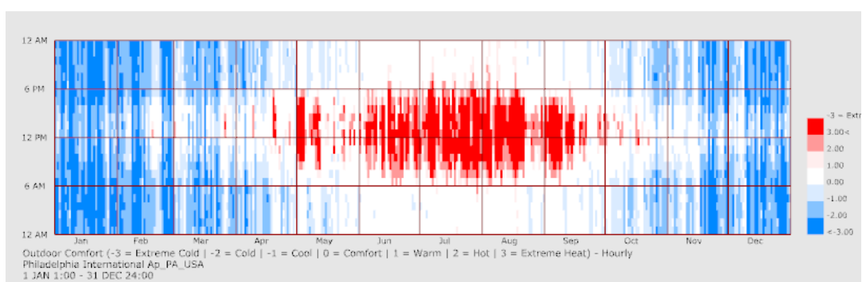
PERCENTAGE OF COMFORTABLE HOURS:
37.42
PERCENTAGE COMFORTABLE SHORT PERIOD:
18.50
HEAT STRESS:
12.26
COLD STRESS:
31.81



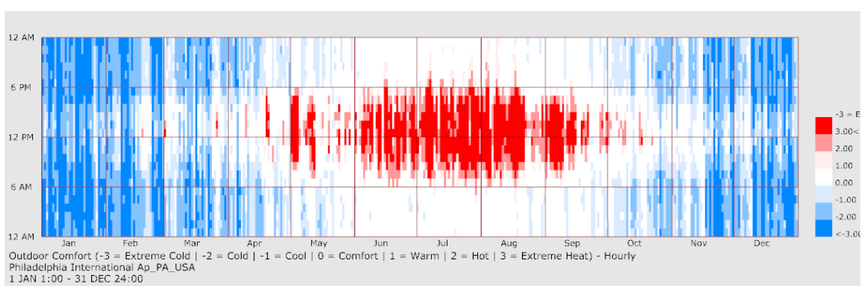
NONE



WIND WALL



SUN SHADE



TRELLIS

I tried very hard to achieve 100% comfort, however I found it very difficult to get past 37%, as is evident by my results.
I think that this is largely the case because the corner of the plaza that I selected has a lot of shade (as does the site in general), so the additional shading really didn't improve the situation. I think this is also an explanation for why the cold stress is almost triple the heat stress. I think that pursuing passive design stragies that bring heat to the area would be a better tactic. For example, perhaps a fire pit, addding a material to the ground of the plaza to increase the absorption of heat, and adding mirrors tactfully to reflect the sunlight back to the plaza after it has passed.

JORDAN HILLIER | ARCH 633 | FALL 2017 | MOSTAPHA SADEGHIPOUR ROUDSARI