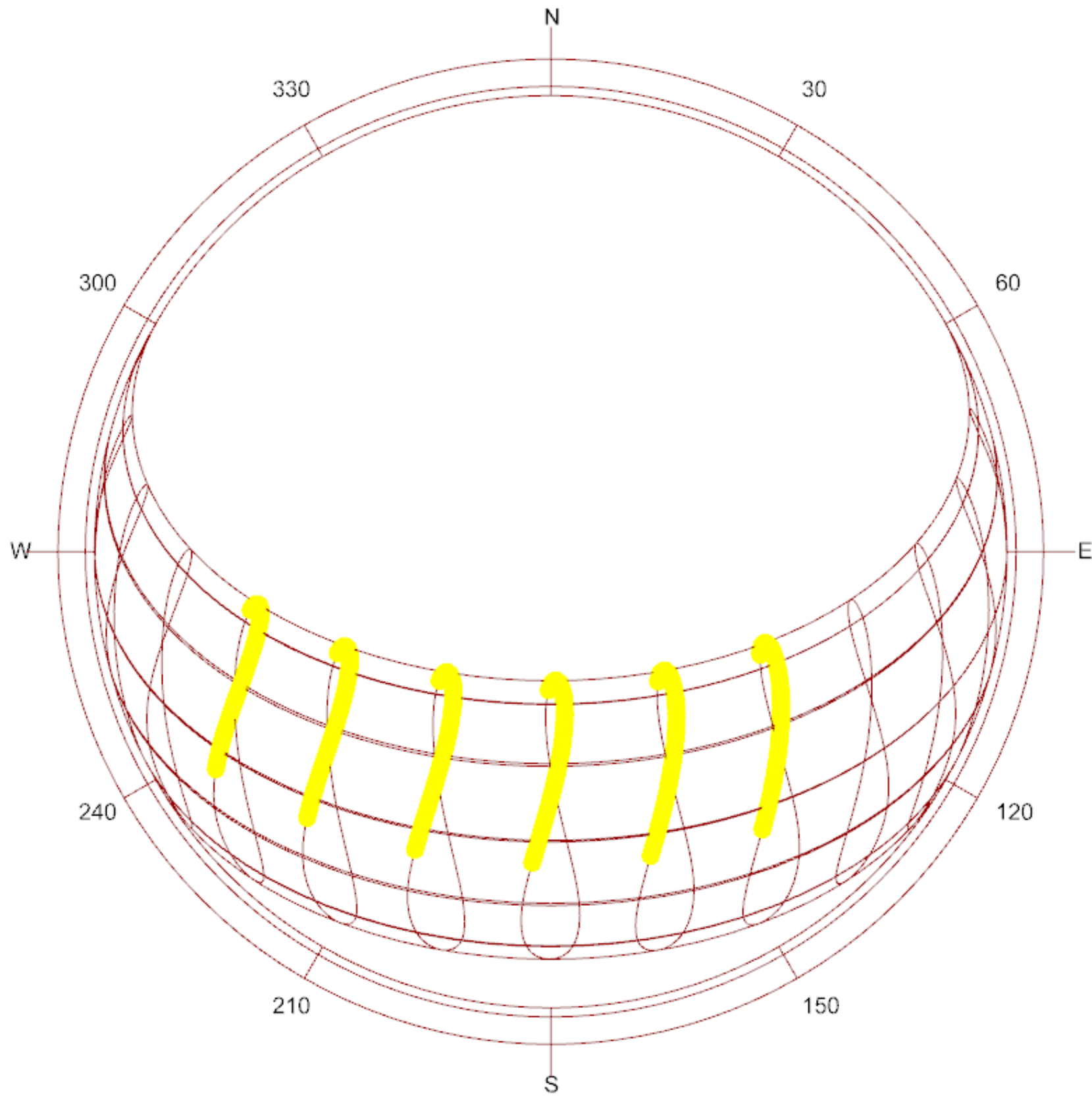


ASSIGNMENT 1

ARCH 753-001

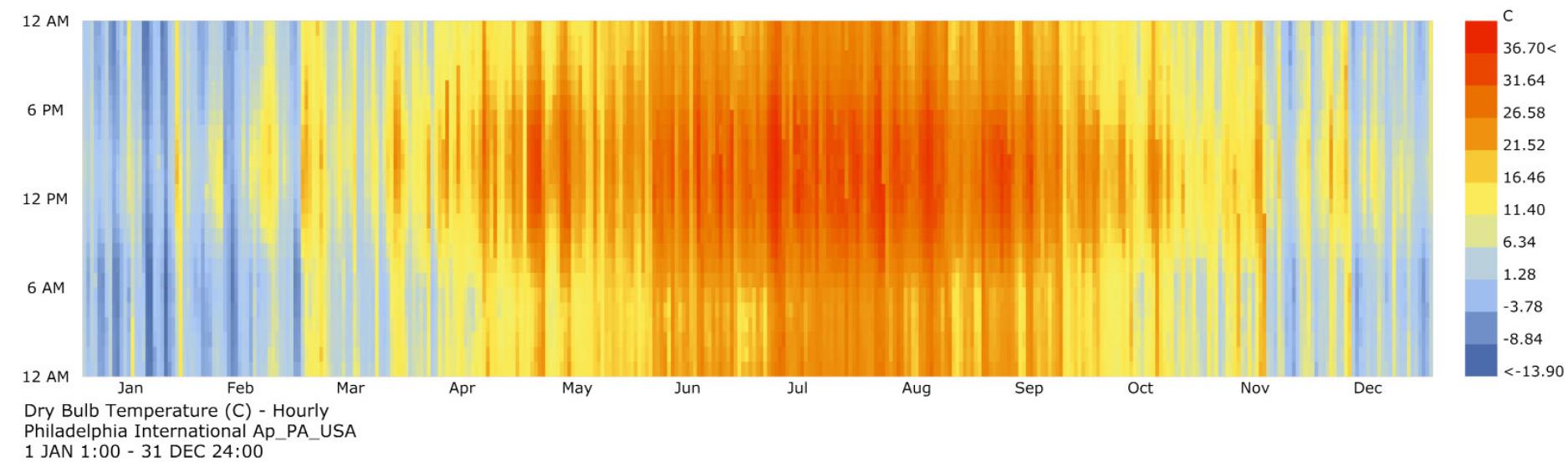
Hewen Jiang



Sun Path

Philadelphia

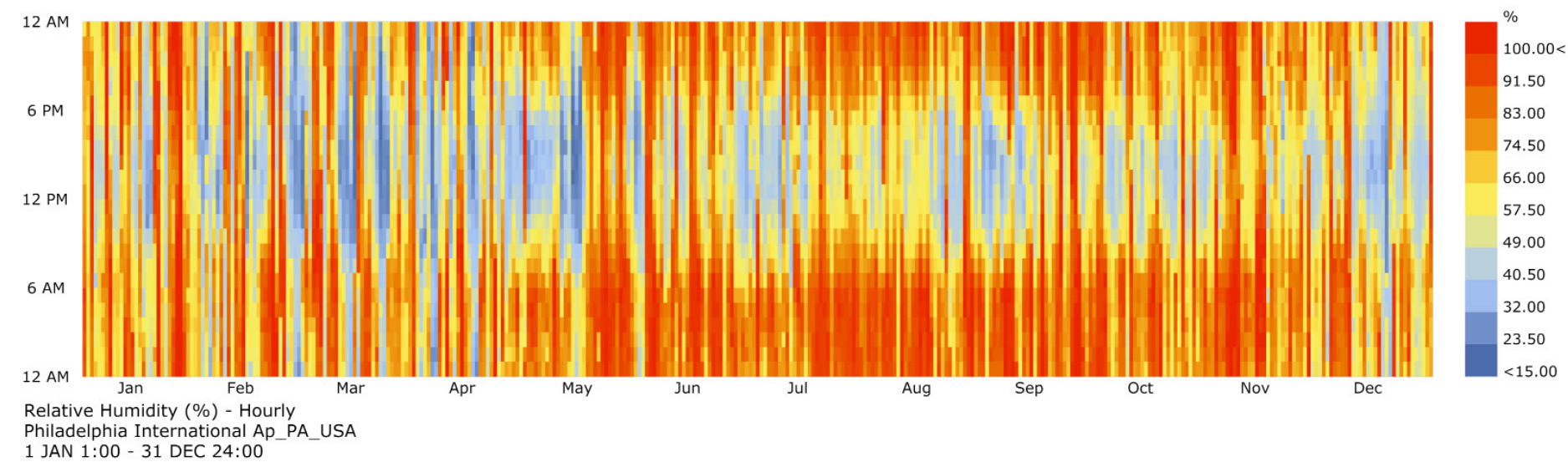
Time period: June - September, 10:00 - 16:00
Sun Altitudes: 28.9 - 73.6
Sun Auzimuths: 113.0 - 259.9



Drybulb Tempterature

Philadelphia

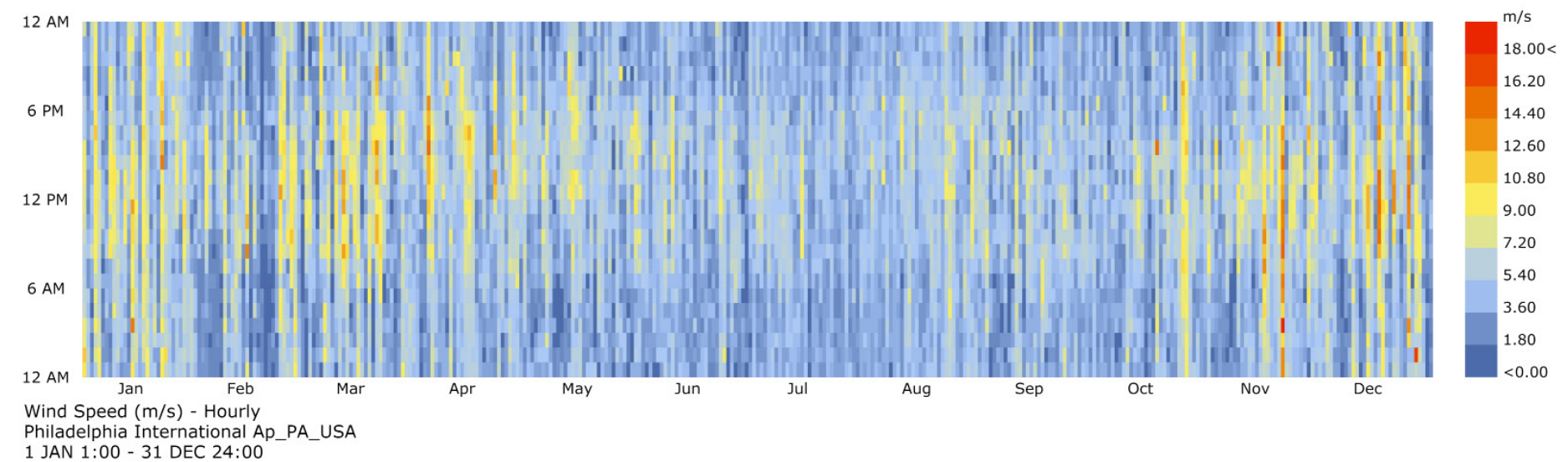
Domain: -13.9 - 36.7
Average: 12.7



Relative Humidity

Philadelphia

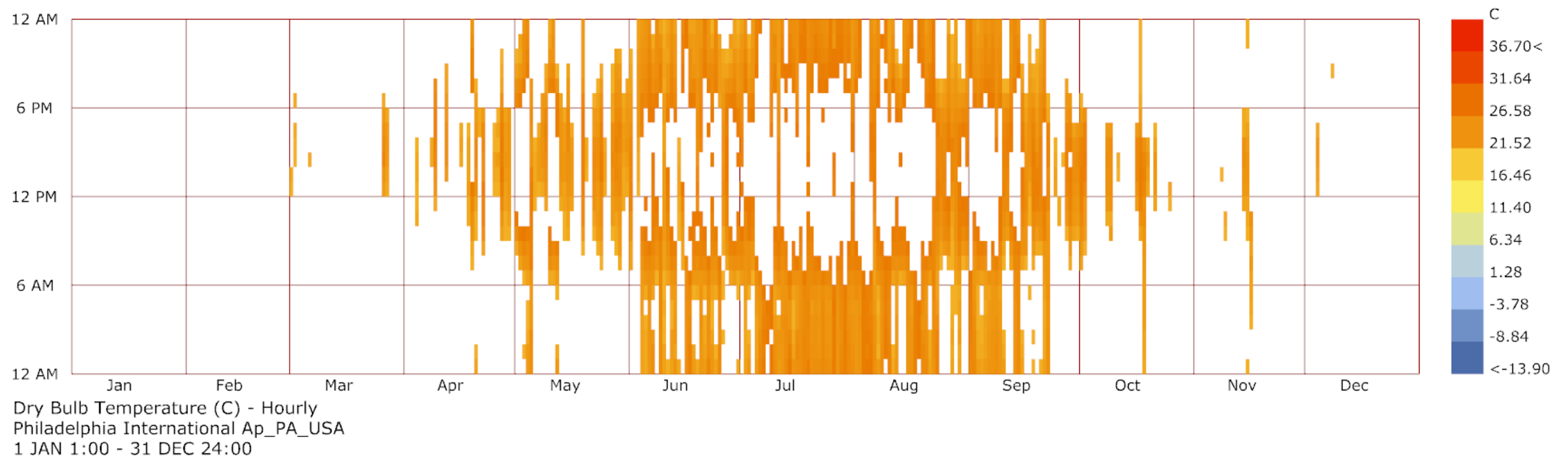
Domain: 15%-100%
Average: 66.0%



Wind Speed

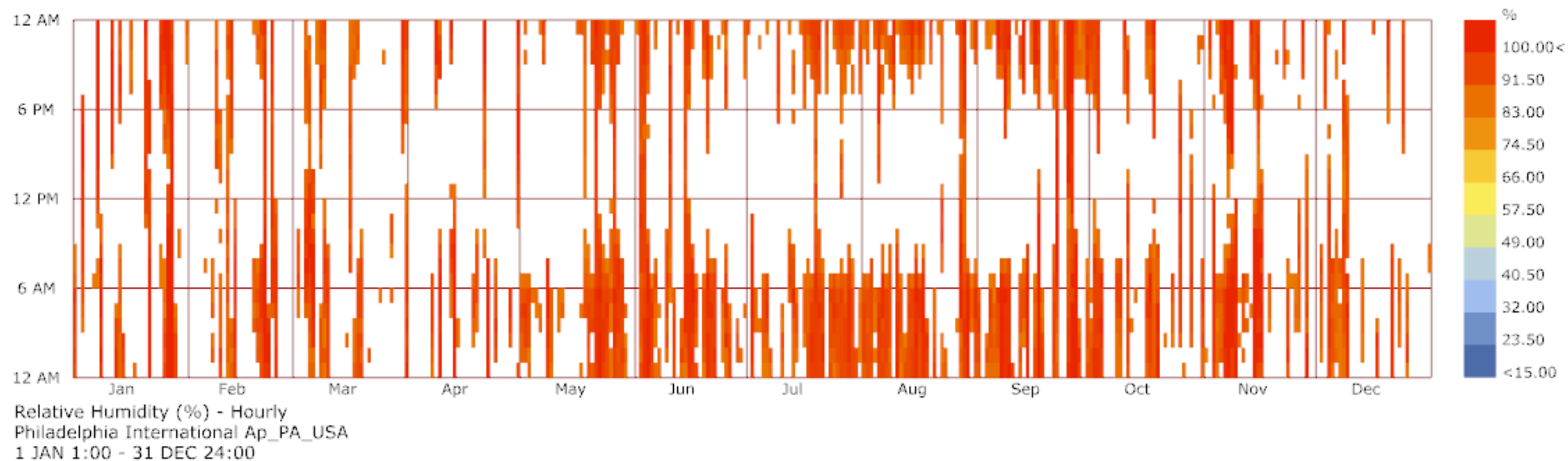
Philadelphia

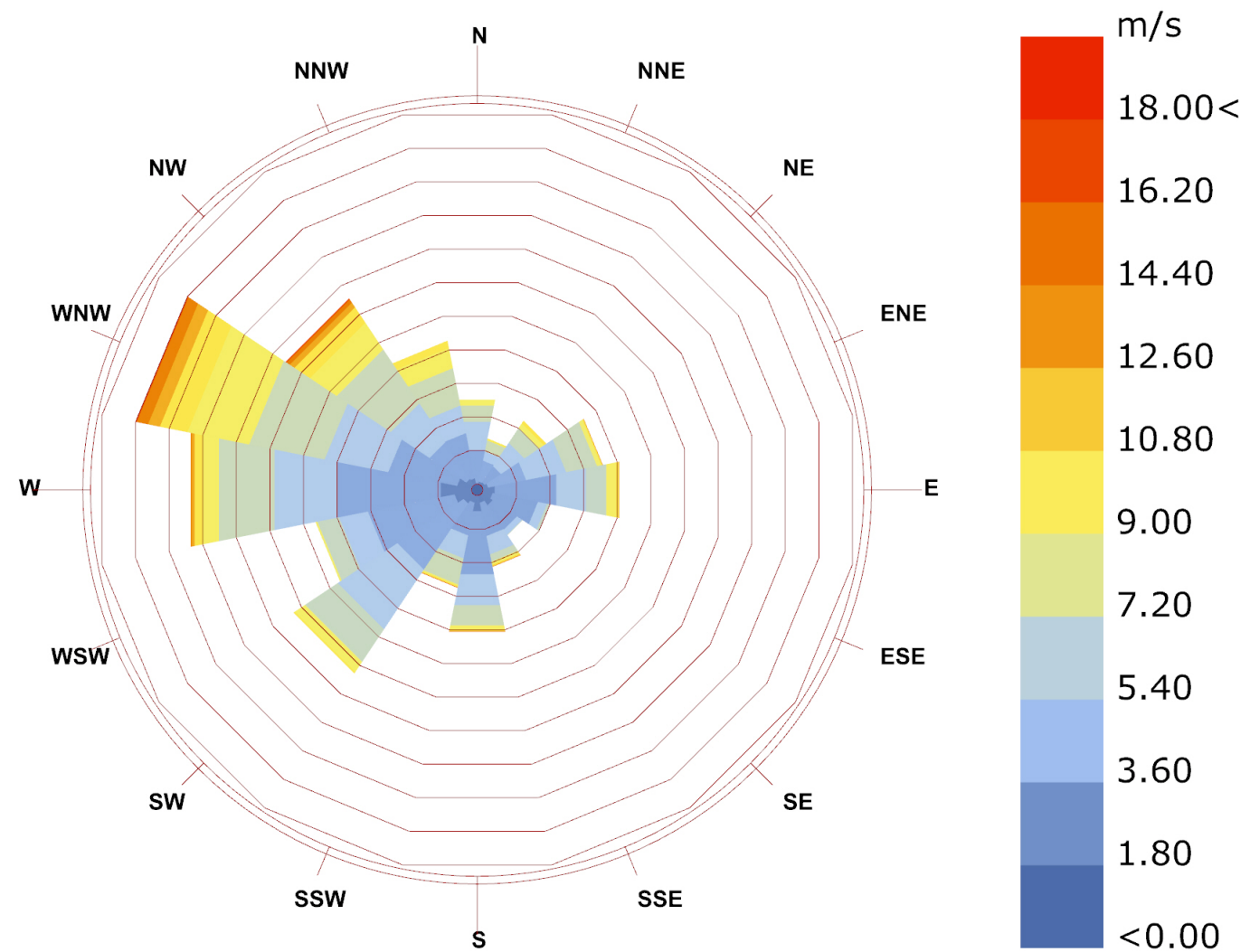
Domain: 0-18 (m/s)
Average: 4.18



Temperature 18-26 Philadelphia

The days have this period of temperature occur at the daytime of April, May and October, and the night time of June -September.





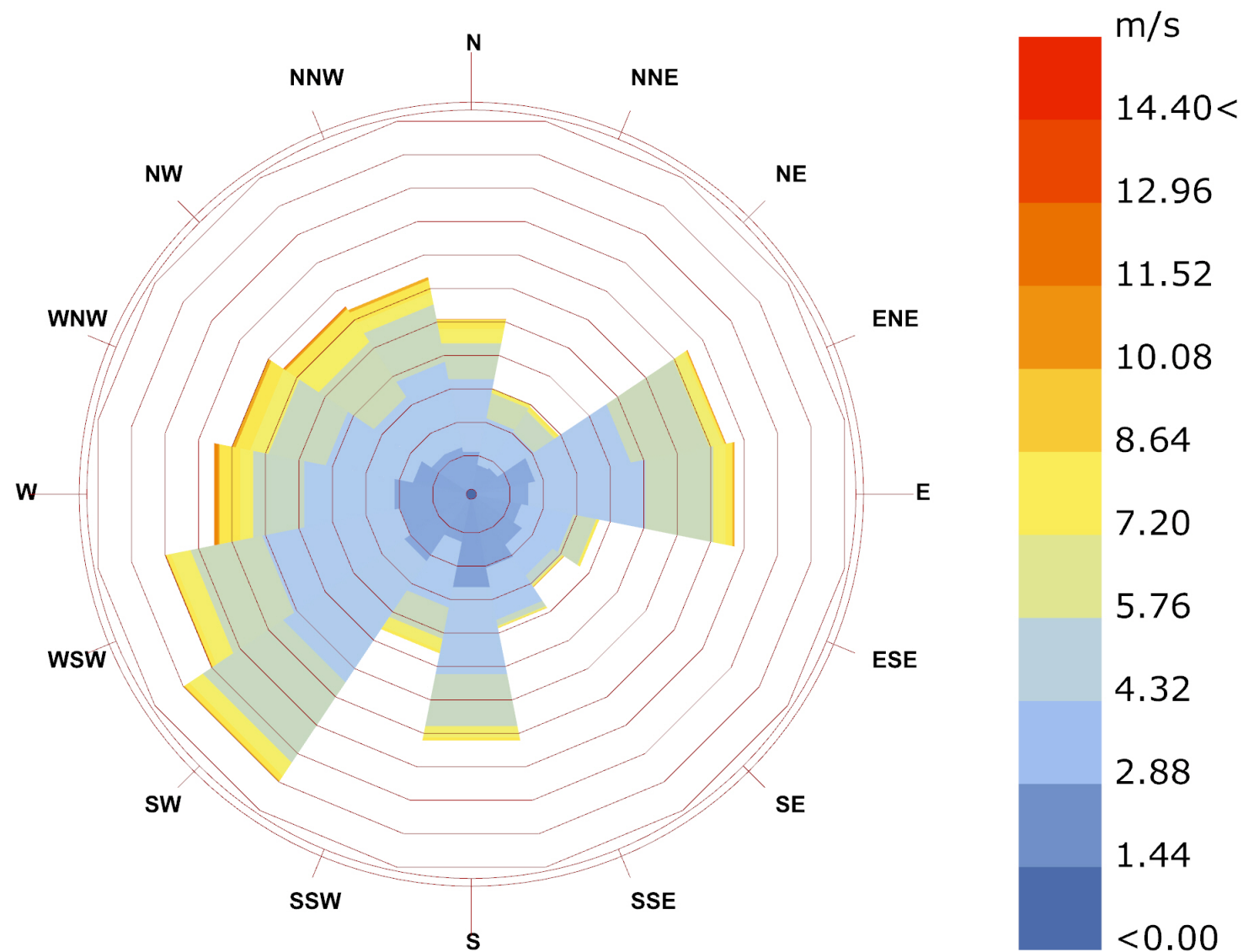
Wind-Rose
Philadelphia International Ap_PA_USA
1 NOV 1:00 - 31 MAR 24:00
Hourly Data: Wind Speed (m/s)
Calm for 3.78% of the time = 137 hours.
Each closed polyline shows frequency of 1.4%. = 51 hours.

Wind Rose Map of Winter

Philadelphia

In winter, most of the wind come from northwest.

Wind Rose Map of Summer



Wind-Rose
Philadelphia International Ap_PA_USA
1 MAY 1:00 - 31 OCT 24:00
Hourly Data: Wind Speed (m/s)
Calm for 2.36% of the time = 104 hours.
Each closed polyline shows frequency of 1.0%. = 43 hours.

Wind Rose Map of Summer

Philadelphia

In summer, most of the wind come from west and ENE.

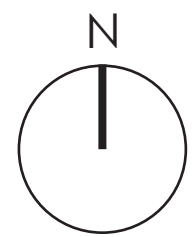
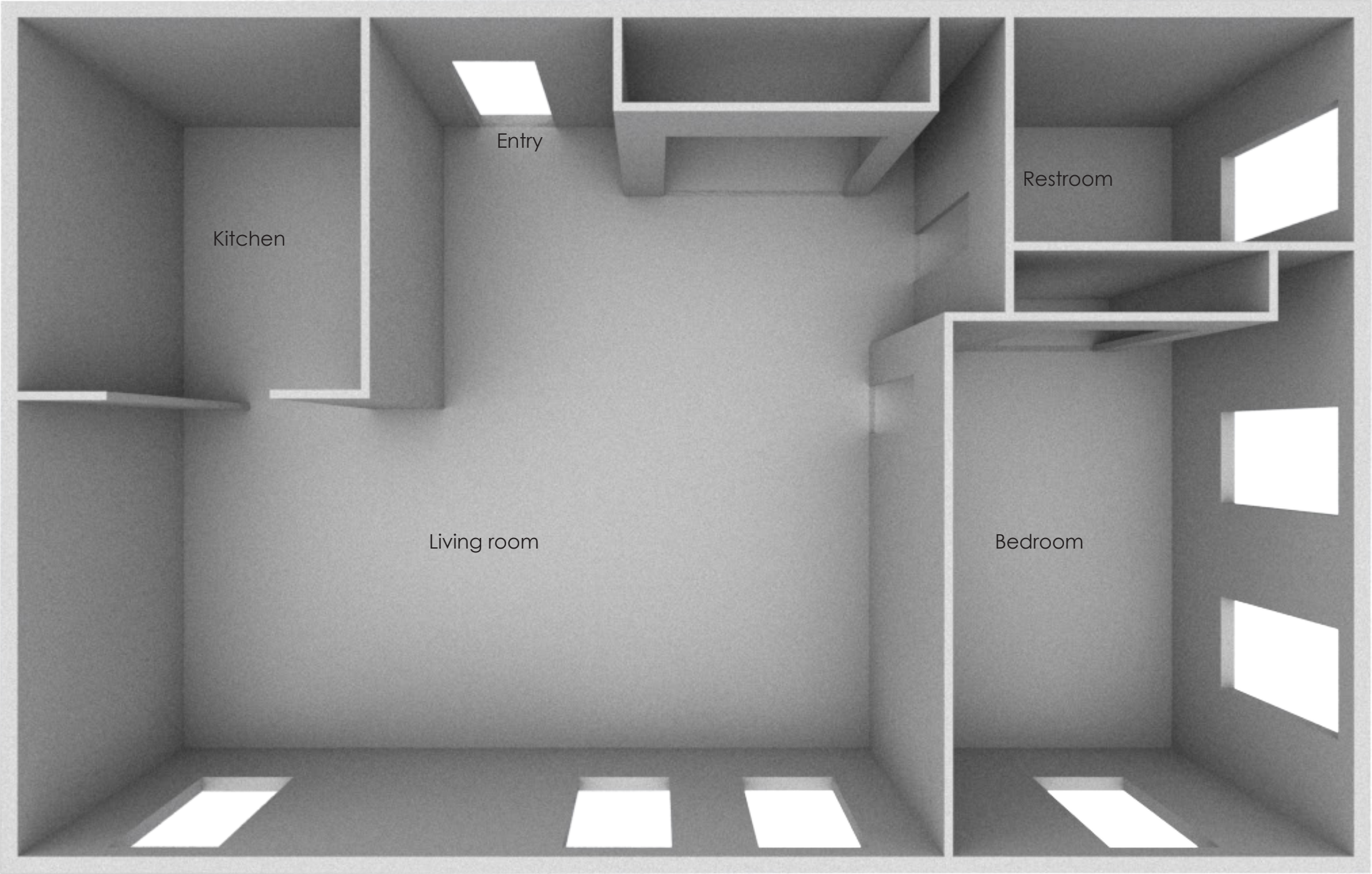


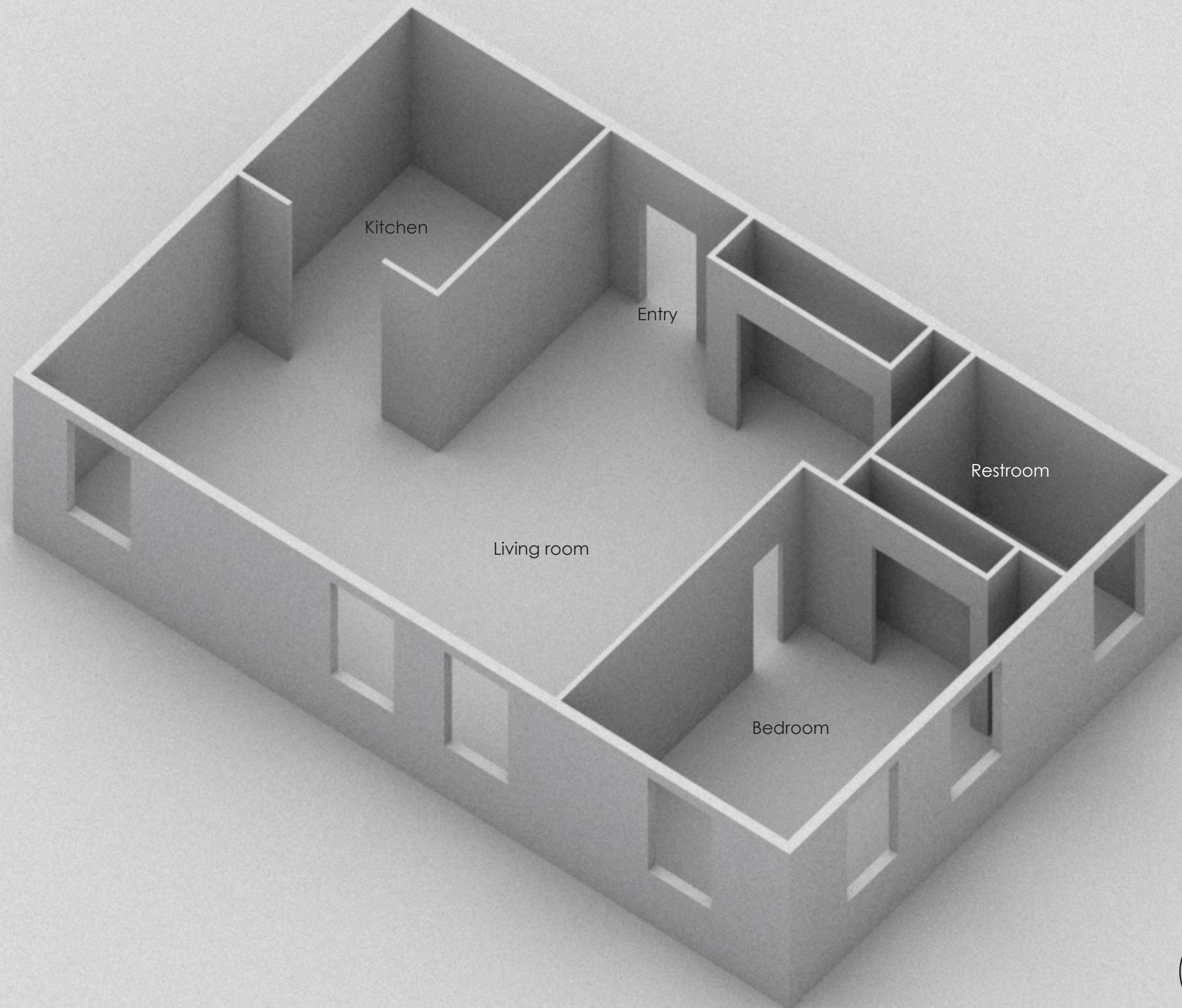
Location: 3900 Chestnut Hall, Philadelphia
Type: Apartment



Floor: 6

Windows open: 2 sides (south + west)





STRATEGY FOR THE HOUSE

1. Having the sunshine shading on the south windows to block the sunshine in summer.
- 2.The south windows of bedroom can move to the east side, since I am not likely to be in the house between 9am - 5pm, it would be better to make the best use of windows.
- 3.Kitchen should be arranged close to windows.